BOILER SAFETY REPORT

FARIHA KNIT TEX LTD. (Extension Buildings)

Factory ID: 24254

Address: Baroibogh, Enayetnagar, Fatullah, Narayanganj

GPS Coordinates: 23.618963, 90.482933

Factory List	:	FARIHA KNIT TEX LTD. (Extension Buildings) (24254) FARIHA KNIT TEX LTD. (9488) FARIHA KNIT TEX LTD. (Extension Buildings 2) (24777)
Number of Boilers	:	5
Boiler Registration Numbers	:	BB 4387, BB 7351, BB 11751, BB 11752, BB 13706

RSC RMG SUSTAINABILITY COUNCIL

EXECUTIVE SUMMARY

A comprehensive boiler safety inspection of the factory – **FARIHA KNIT TEX LTD. (Extension Buildings) (24254)** was conducted by the RMG Sustainability Council, covering 5 boilers bearing the registration numbers – BB 4387, BB 7351, BB 11751, BB 11752, and BB 13706. The inspection aimed for the safety checks of the boiler and provide recommendations for safe operation and maintenance.

The inspection process was divided into three distinct parts. Firstly, an external visual inspection was carried out to evaluate the overall condition of the boiler and provide guidance for the upcoming full-fledged boiler safety inspection. Next, an internal inspection and hydrostatic pressure test (commonly referred to as a hydrotest) inspection was conducted to assess the safety and structural integrity of the boiler. Sufficient time was allocated to allow the factory to prepare for the final inspection stage, which involved a functional test inspection. This stage required the boiler to be operational to enable the inspection team to verify the functionality of different safety circuits.

From the inspection observations -

BB 4387, BB 7351, BB 11751, BB 11752, and BB 13706 are in operable condition, but a few issues - outlined in this report, are to be addressed in a timely manner.

Boiler Registration Number	External visual inspection	Internal & Hydrotest inspection		Functional test inspection	
	Date	Date	Remarks	Date	Remarks
BB 4387	3-Jan-22	12-Mar-25 1-Sep-25	On 12-Mar-25, the inspection was not completed due to pressure part repair (tube blind, post manufacturing welding) without the necessary documentation. After the documentation was reviewed, another inspection was scheduled on 1-Sep-25, and the inspection was satisfactory.	10-Sep-25	
BB 7351	3-Jan-22	5-Mar-25	Satisfactory	14-Jul-25 23-Jul-25	On 14-Jul-25, the functional test inspection could not be completed due to water level limiter does not shut down the firing at lowest & visible water level. Another inspection was scheduled on 23-Jul-25 to complete the inspection.
BB 11751	3-Jan-22	19-Mar-25	Satisfactory	14-Jul-25 2-Nov-25	On 14-Jul-25, the functional test inspection could not be completed due to EGB damper does not shut down automatically if emergency initiated. Another inspection was scheduled on 2-Nov-25 to complete the inspection.
BB 11752	3-Jan-22	1-Jul-25	Satisfactory	10-Sep-25	
BB 13706	5-Mar-25	23-Jun-25	Satisfactory	14-Jul-25	

LIMITATIONS

The information in this boiler safety inspection report was obtained during a factory visit and discussion with local factory management. Services performed by the inspectors are conducted in a manner consistent with the level of care and skill generally exercised by members of the engineering and auditing profession. However, an effort has been made to discover all meaningful areas within the stipulated time.

In evaluating the subject site, the inspector relies on good faith in the information provided by factory management or employees. The inspector assumes that the information provided is factual, accurate and accepts no responsibility for any deficiency, misstatement or inaccuracies contained in this report as a result of omission or misrepresentation of any person interviewed or contacted.

The findings and recommendations in this report are not intended to imply, guarantee, ensure or warrant compliance with any government regulations. Additionally, the results do not imply in any way that compliance with the findings or recommendations, as stated in this report, will eliminate all risks or exposures not referred to in this report. Compliance with the findings and recommendations stated in this report does not relieve the factory from the obligation to comply with specific project requirements, industry standards, or the provisions of any local government regulations.

In case any critical safety concerns are found that require the RSC to recommend an immediate boiler shutdown, for applicable cases, the RSC will inform the Chief Inspector of Boilers (CIoB) office and collaborate with them on all subsequent steps to remediate the issue(s).

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1. EXTERNAL VISUAL INSPECTION

Inspection Date	Boiler Registration Number	Author(s)
3-Jan-22	BB 4387, BB 7351, BB 11752, BB 11751	Faisal Bin Faruk
5-Mar-25	BB 13706	Md. Tanvir Siraj Nawaze Mahmud

Reviewed by : Kazi Sefat-E-Nur

Approved by : Md. Mehedi Hasan

FINDINGS AND RECOMMENDATIONS

The table below summarizes the identified boiler safety hazards during this inspection. Recommendations have been provided for each finding.

FINDING NO:	B-1
CATEGORY:	DOCUMENTATION
BOILER REGISTRATION NO:	BB 11751
FINDING: Necessary technical documents (except design calculation, maintenance logbook and datasheet of accessories) were not available to verify boiler design and operation parameters.	
RECOMMENDATION: Documentation including manufacturing drawings and calculations, Piping and Instrumentation diagram, electrical wiring diagram, commissioning documents, data sheets of mountings, accessories and feed water pump, boiler operational and maintenance logbook, operation and maintenance manual, water treatment design and calculation, flue gas analysis report and water treatment report shall be available to verify the present condition of the boiler.	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-2	
CATEGORY:	DOCUMENTATION	
BOILER REGISTRATION NO:	BB 13706	
FINDING: Necessary technical documents (except design calculation, maintenance logbook and datasheet of accessories) were not available to verify boiler design and operation parameters.		
RECOMMENDATION: Documentation including manufacturing drawings and calculations, Piping and Instrumentation diagram, electrical wiring diagram, commissioning documents, data sheets of mountings, accessories and feed water pump, boiler operational and maintenance logbook, operation and maintenance manual, water treatment design and calculation, flue gas analysis report and water treatment report shall be available to verify the present condition of the boiler.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-3	
CATEGORY:	DOCUMENTATION	
BOILER REGISTRATION NO:	BB 11752	
FINDING: Necessary technical documents (except design calculation, commissioning document, maintenance logbook and datasheet of accessories) were not available to verify boiler design and operation parameters.		
RECOMMENDATION: Documentation including manufacturing drawings and calculations, Piping and Instrumentation diagram, electrical wiring diagram, commissioning documents, data sheets of mountings, accessories and feed water pump, boiler operational and maintenance logbook, operation and maintenance manual, water treatment design and calculation, flue gas analysis report and water treatment report shall be available to verify the present condition of the boiler.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-4
CATEGORY:	DOCUMENTATION
BOILER REGISTRATION NO:	BB 7351
FINDING: Necessary technical documents (commissioning documents, water treatment design & calculation, flue gas analysis report, and water treatment report) were not available to verify boiler design and operation parameters.	
RECOMMENDATION: Documentation including manufacturing drawings and calculations, Piping and Instrumentation diagram, electrical wiring diagram, commissioning documents, data sheets of mountings, accessories and feed water pump, boiler operational and maintenance logbook, operation and maintenance manual, water treatment design and calculation, flue gas analysis report and water treatment report shall be available to verify the present condition of the boiler.	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-5	
CATEGORY:	DOCUMENTATION	
BOILER REGISTRATION NO:	BB 4387	
FINDING: Necessary technical documents (Piping & Instrumentation diagram, water treatment design & calculation, flue gas analysis report and water treatment report) were not available to verify boiler design and operation parameters.		
RECOMMENDATION: Documentation including manufacturing drawings and calculations, Piping and Instrumentation diagram, electrical wiring diagram, commissioning documents, data sheets of mountings, accessories and feed water pump, boiler operational and maintenance logbook, operation and maintenance manual, water treatment design and calculation, flue gas analysis report and water treatment report shall be available to verify the present condition of the boiler.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-6	
CATEGORY:	ELECTRICAL WIRING SYSTEM	
BOILER REGISTRATION NO:	BB 4387	
FINDING: No emergency stop push switch was available near the entrance outside of the boiler room.		
RECOMMENDATION: Emergency stop push switches must be installed on the boiler control panel and outside the boiler room near every entrance door.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-7	
CATEGORY:	ELECTRICAL WIRING SYSTEM	
BOILER REGISTRATION NO:	BB 7351	
FINDING: No emergency stop push switch was available near the entrance outside of the boiler room.		
RECOMMENDATION: Emergency stop push switches must be installed on the boiler control panel and outside the boiler room near every entrance door.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-8	
CATEGORY:	ELECTRICAL WIRING SYSTEM	
BOILER REGISTRATION NO:	BB 11751	
FINDING: No emergency stop push switch was available near the entrance outside of the boiler room.		
RECOMMENDATION: Emergency stop push switches must be installed on the boiler control panel and outside the boiler room near every entrance door.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-9	
CATEGORY:	ELECTRICAL WIRING SYSTEM	
BOILER REGISTRATION NO:	BB 11752	
FINDING: No emergency stop push switch was available near the entrance outside of the boiler room.		
RECOMMENDATION: Emergency stop push switches must be installed on the boiler control panel and outside the boiler room near every entrance door.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-10
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 4387
FINDING: Low Low Water Level (LLWL) was not marked properly on water level gauge glass system.	
RECOMMENDATION: The Low Low Water Level (LLWL) should be marked beside the gauge glass on a separate arrangement so that the water level can be visualized and identified clearly.	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-11
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 7351
FINDING: Low Low Water Level (LLWL) was not marked properly on water level gauge glass system.	
RECOMMENDATION: The Low Low Water Level (LLWL) should be marked beside the gauge glass on a separate arrangement so that the water level can be visualized and identified clearly.	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-12
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 11752
FINDING: Low Low Water Level (LLWL) was not marked properly on water level gauge glass system.	
RECOMMENDATION: The Low Low Water Level (LLWL) should be marked beside the gauge glass on a separate arrangement so that the water level can be visualized and identified clearly.	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-13
CATEGORY:	SUPPORT AND ACCESS
BOILER REGISTRATION NO:	BB 4387
FINDING: A boiler with a height of 8 feet or more was observed with an inadequate platform, ladder, and handrail, making it inaccessible.	
RECOMMENDATION: An operation, maintenance, and inspection platform with a minimum width of 2.5 feet, a railing with a minimum height of 3.5 feet, and a ladder - that does not pose fall hazard - should be provided.	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-14	
CATEGORY:	BOILER ROOM	
BOILER REGISTRATION NO:	BB 4387	
FINDING: Water leakage was observed inside the boiler room.		
RECOMMENDATION: Boiler and its surrounding shall be free from storage, obstruction and free from slipping hazard for proper monitoring by boiler operator and other relevant maintenance technicians.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-15	
CATEGORY:	BOILER ROOM	
BOILER REGISTRATION NO:	BB 11752	
FINDING: Water leakage was observed inside the boiler room.		
RECOMMENDATION: Boiler and its surrounding shall be free from storage, obstruction and free from slipping hazard for proper monitoring by boiler operator and other relevant maintenance technicians.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-16	
CATEGORY:	DOCUMENTATION	
BOILER REGISTRATION NO:	BB 4387	
FINDING: Boiler's initial registration certificate was not available on-site during the inspection.		
RECOMMENDATION: Boiler registration certificate from the government authority which was provided after the installation shall be available on-site during the inspection.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-17	
CATEGORY:	DOCUMENTATION	
BOILER REGISTRATION NO:	BB 7351	
FINDING: Boiler's initial registration certificate was not available on-site during the inspection.		
RECOMMENDATION: Boiler registration certificate from the government authority which was provided after the installation shall be available on-site during the inspection.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-18
CATEGORY:	FUEL SYSTEM
BOILER REGISTRATION NO:	BB 4387
FINDING: Fuel line was not properly supported.	
RECOMMENDATION: Fuel line shall be constructed with appropriate materials as specified by the manufacturer/standard. Support and protection against corrosion shall be as per the requirements of the gas supply company and NFPA 54.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	1 MONTH

FINDING NO:	B-19
CATEGORY:	FUEL SYSTEM
BOILER REGISTRATION NO:	BB 7351
FINDING: Fuel line connection was not terminated properly.	
RECOMMENDATION: Any fuel line openings in boiler room shall be diverted outside of the boiler room or sealed off with a bond plug/blind flange to prevent fuel leakage.	
PRIORITY:	P1
REMEDIATION TIME FRAME:	2 WEEKS

FINDING NO:	B-20
CATEGORY:	FUEL SYSTEM
BOILER REGISTRATION NO:	BB 11752
FINDING: Fuel line connection was not terminated properly.	
RECOMMENDATION: Any fuel line openings in boiler room shall be diverted outside of the boiler room or sealed off with a bond plug/blind flange to prevent fuel leakage.	
PRIORITY:	P1
REMEDIATION TIME FRAME:	2 WEEKS

FINDING NO:	B-21
CATEGORY:	SAFETY VALVE
BOILER REGISTRATION NO:	BB 4387
FINDING: Boiler Steam Header Safety Valve outlet line was not directed outside of the boiler room.	
RECOMMENDATION: Boiler Steam Header Safety Valve outlet line should be directed outside of the boiler room with proper support and drainage system.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	1 MONTH

FINDING NO:	B-22	
CATEGORY:	THERMAL INSULATION	
BOILER REGISTRATION NO:	BB 4387	
FINDING: Boiler steam header and steam pipeline were found with improper insulation.		
RECOMMENDATION: Proper insulation to exposed parts of the boiler body and steam distribution pipelines should be provided.		
PRIORITY:	P2	
REMEDIATION TIME FRAME:	1 MONTH	

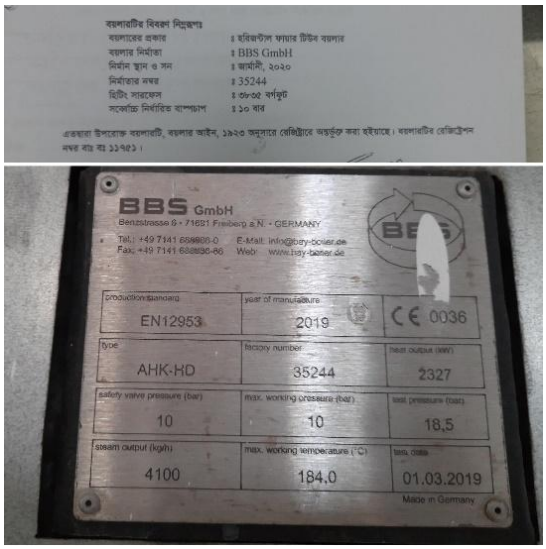
FINDING NO:	B-23	
CATEGORY:	THERMAL INSULATION	
BOILER REGISTRATION NO:	BB 7351	
FINDING: Boiler steam header and steam pipeline were found with improper insulation.		
RECOMMENDATION: Proper insulation to exposed parts of the boiler body and steam distribution pipelines should be provided.		
PRIORITY:	P2	
REMEDIATION TIME FRAME:	1 MONTH	

FINDING NO:	B-24
CATEGORY:	THERMAL INSULATION
BOILER REGISTRATION NO:	BB 11752
FINDING: Boiler steam header and steam pipeline were found with improper insulation.	
RECOMMENDATION: Proper insulation to exposed parts of the boiler body and steam distribution pipelines should be provided.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	1 MONTH

FINDING NO:	B-25
CATEGORY:	BOILER ROOM
BOILER REGISTRATION NO:	BB 7351
FINDING: Water leakage was observed inside the boiler room.	
RECOMMENDATION: Boiler and its surrounding shall be free from storage, obstruction and free from slipping hazard for proper monitoring by boiler operator and other relevant maintenance technicians.	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-26
CATEGORY:	STEAM DISTRIBUTION NETWORK
BOILER REGISTRATION NO:	BB 11752
FINDING: Unused steam line connection was not terminated properly.	
RECOMMENDATION: Any unused & unprotective steam line shall be terminated in an appropriate manner that does not create any possibility of burn hazard for the operator(s).	
PRIORITY:	P1
REMEDIATION TIME FRAME:	2 WEEKS

FINDING NO:	B-27
CATEGORY:	IDENTIFICATION
BOILER REGISTRATION NO:	BB 11751
FINDING: Inconsistency was observed between the nameplate data and the CIoB provided certificate copy for the boiler regarding manufacturing year.	
RECOMMENDATION: Information provided in the nameplate and in the CIoB provided certificate shall be consistent. Any alteration shall be approved from the CIoB and a copy to be preserved on site.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	2 MONTHS



FINDING NO:	B-28
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 13706
FINDING: The steam pressure gauge range was insufficient.	
RECOMMENDATION: The boiler pressure gauge range should be at least twice the boiler's maximum allowable working pressure mentioned in the boiler license or in accordance with any recognized international standard.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	1 MONTH

FINDING NO:	B-29
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 7351
FINDING: The steam pressure gauge range was insufficient.	
RECOMMENDATION: The boiler pressure gauge range should be at least twice the boiler's maximum allowable working pressure mentioned in the boiler license or in accordance with any recognized international standard.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	1 MONTH

FINDING NO:	B-30
CATEGORY:	SAFETY VALVE
BOILER REGISTRATION NO:	BB 4387
FINDING: A control valve was observed between the Steam Header and the Safety Valve.	
RECOMMENDATION: The steam header safety valve shall be mounted directly with the steam header without any valves in between.	
PRIORITY:	P1
REMEDIATION TIME FRAME:	2 WEEKS

2. INTERNAL INSPECTION & HYDROSTATIC PRESSURE TEST INSPECTION

Inspection Date	Boiler Registration Number	Author(s)
5-Mar-25	BB 7351	Md. Tanvir Siraj Nawaze Mahmud
12-Mar-25	BB 4387	Faisal Bin Faruk Nazmul Hasan
19-Mar-25	BB 11751	Nazmul Hasan Susanta Roy Chowdhury
23-Jun-25	BB 13706	Md. Almas Hossain Polash Md. Abu Sayed
1-Jul-25	BB 11752	Mushfiq Ibne Kader Md. Abu Sayed
1-Sep-25	BB 4387	Siam Mahbub Md. Humayun Kabir Tipu

Reviewed by : Kazi Sefat-E-Nur

Approved by : Md. Mehedi Hasan

FINDINGS AND RECOMMENDATIONS

The table below summarizes the identified boiler safety hazards during this inspection. Recommendations have been provided for each finding.

FINDING NO:	B-31
CATEGORY:	SCALES AND DEPOSITS
BOILER REGISTRATION NO:	BB 11751
FINDING: Carbon deposition & hard scale was found in the smoke tubes.	
RECOMMENDATION: The inside of the fire tubes should be cleaned periodically to prevent excessive soot build-up.	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-32
CATEGORY:	SCALES AND DEPOSITS
BOILER REGISTRATION NO:	BB 11752
FINDING: Salt and thin scale (1~1.5 mm) formation was observed on the waterside of furnace.	
RECOMMENDATION: Cleaning is required. A water treatment station is to be used. Feed and boiler water quality and conditioning should be verified and monitored. The boiler operator should operate the boiler with proper blowdown.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	1 MONTH

FINDING NO:	B-33
CATEGORY:	BOILER PRESSURE PARTS
BOILER REGISTRATION NO:	BB 4387
FINDING: One fire tube of the boiler was found blinded, obstructing the flue gas flow.	
RECOMMENDATION: The blinded fire tubes should be replaced with new tubes to reopen the flue gas path as per manufacturer's guidance with the written permission from the Chief Inspector of Boilers.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	6 MONTHS

FINDING NO:	B-34
CATEGORY:	SCALES AND DEPOSITS
BOILER REGISTRATION NO:	BB 4387
FINDING: Salt and scale formation was observed on the waterside on the smoke tubes and end plate.	
RECOMMENDATION: Cleaning is required. A water treatment station is to be used. Feed and boiler water quality and conditioning should be verified and monitored. The boiler operator should operate the boiler with proper blowdown.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	1 MONTH

3. FUNCTIONAL TEST INSPECTION

Inspection Date	Boiler Registration Number	Author(s)
14-Jul-25	BB 7351, BB 11751, BB 13706	Kazi Sefat-E-Nur Md. Almas Hossain Polash
23-Jul-25	BB 7351	Susanta Roy Chowdhury Arif Ahamed Mithun
10-Sep-25	BB 4387, BB 11752	Md. Sohidul Islam
2-Nov-25	BB 11751	Faisal Bin Faruk

Reviewed by : Kazi Sefat-E-Nur

Approved by : Md. Mehedi Hasan

FINDINGS AND RECOMMENDATIONS

The table below summarizes the identified boiler safety hazards during this inspection. Recommendations have been provided for each finding.

FINDING NO:	B-35
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 7351
FINDING: There was no interlock for the Low Low Water (LLWL) level trip of the boiler.	
RECOMMENDATION: The Low Low Water (LLW) level tripping mechanism should be functional.	
PRIORITY:	P1
REMEDIATION TIME FRAME:	1 WEEK

FINDING NO:	B-36
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 11752
FINDING: The Steam Pressure Limiter was missing.	
RECOMMENDATION: Steam Pressure Limiter should be installed and kept functional.	
PRIORITY:	P1
REMEDIATION TIME FRAME:	1 MONTH