BOILER SAFETY REPORT

Giant Knit Fashion Ltd.

Factory ID: 9242

Address: Mouza, Chandora, Jaydevpur Chow Rasta, Joydebpur, Gazipur 1700

GPS Coordinates: 23.989228, 90.386648

Factory List	:	Giant Knit Fashion Ltd. (9242)
		Mavis Garment Ltd. (9240)
		SHAFI PROCESSING INDUSTRIES LTD. (9239)
Number of Boilers	:	4
Boiler Registration Numbers	:	BB 3203, BB 3205, BB 13288, BB 9570

RSC RMG SUSTAINABILITY COUNCIL

EXECUTIVE SUMMARY

A comprehensive boiler safety inspection of the factory – **Giant Knit Fashion Ltd. (9242)** was conducted by the RMG Sustainability Council, covering 4 boilers bearing the registration numbers – BB 3203, BB 3205, BB 13288 and BB 9570. 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 13288 and BB 9570 are in operable condition, but a few issues - outlined in this report, are to be addressed in a timely manner.

Linked ID- **Mavis Garment Ltd. (9240)** in the same factory premises is using steam from boiler BB 9570 and BB 13288 and **SHAFI PROCESSING INDUSTRIES LTD. (9239)** in the same factory premises is using steam from boiler BB 13287

Boiler Registration Number	External visual inspection	Internal & Hydrotest inspection		Functional test inspection	
	Date	Date	Remarks	Date	Remarks
BB 3203	21-Mar-22	The office of the Chief Inspector of Boilers cancelled the registration of these boilers due to damage & unusable condition on 23-Jun-22.			
BB 3205	21-Mar-22				
BB 13288	28-Aug-25	28-Aug-25	Satisfactory	26-Oct-25	
BB 9570	28-Aug-25	28-Oct-25	Satisfactory	10-Dec-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)
21-Mar-22	BB 3203, BB 3205	Md. Foysal Ahmed
28-Aug-25	BB 13288, BB 9570	Md. Mahfuzul Kabir

Reviewed by : Md. Asfaquzzaman

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:	ELECTRICAL WIRING SYSTEM	
BOILER REGISTRATION NO:	BB 3203	
FINDING: No emergency stop push switch was available near the entrance outside of the boiler room and on the boiler control panel.		
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-2	
CATEGORY:	ELECTRICAL WIRING SYSTEM	
BOILER REGISTRATION NO:	BB 3205	
FINDING: No emergency stop push switch was available near the entrance outside of the boiler room and on the boiler control panel.		
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-3
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 3203
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-4
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 3205
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-5	
CATEGORY:	IDENTIFICATION	
BOILER REGISTRATION NO:	BB 3203	
FINDING: The boiler manufacturer's nameplate was not available on the boiler.		
RECOMMENDATION: The boiler manufacturer's nameplate shall be available on the boiler with accurate technical information and boiler manufacturer's name in standard language.		
PRIORITY:	P2	
REMEDIATION TIME FRAME:	1 MONTH	

FINDING NO:	B-6	
CATEGORY:	IDENTIFICATION	
BOILER REGISTRATION NO:	BB 3205	
FINDING: The boiler manufacturer's nameplate was not available on the boiler.		
RECOMMENDATION: The boiler manufacturer's nameplate shall be available on the boiler with accurate technical information and boiler manufacturer's name in standard language.		
PRIORITY:	P2	
REMEDIATION TIME FRAME:	1 MONTH	

FINDING NO:	B-7	
CATEGORY:	DOCUMENTATION	
BOILER REGISTRATION NO:	BB 3203	
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-8	
CATEGORY:	DOCUMENTATION	
BOILER REGISTRATION NO:	BB 3205	
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-9	
CATEGORY:	SAFETY VALVE	
BOILER REGISTRATION NO:	BB 3203	
FINDING: Boiler Safety Valve outlet line was not directed outside of the boiler room.		
RECOMMENDATION: Boiler 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-10	
CATEGORY:	SAFETY VALVE	
BOILER REGISTRATION NO:	BB 3205	
FINDING: Boiler Safety Valve outlet line was not directed outside of the boiler room.		
RECOMMENDATION: Boiler 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-11	
CATEGORY:	THERMAL INSULATION	
BOILER REGISTRATION NO:	BB 3203	
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-12
CATEGORY:	THERMAL INSULATION
BOILER REGISTRATION NO:	BB 3205
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-13	
CATEGORY:	MONITORING AND CONTROL SYSTEM	
BOILER REGISTRATION NO:	BB 3203	
FINDING: There was no visual flame monitoring system in place.		
RECOMMENDATION: A visual flame monitoring system is required to be installed.		
PRIORITY:	P2	
REMEDIATION TIME FRAME:	1 MONTH	

FINDING NO:	B-14	
CATEGORY:	MONITORING AND CONTROL SYSTEM	
BOILER REGISTRATION NO:	BB 3205	
FINDING: There was no visual flame monitoring system in place.		
RECOMMENDATION: A visual flame monitoring system is required to be installed.		
PRIORITY:	P2	
REMEDIATION TIME FRAME:	1 MONTH	

FINDING NO:	B-15
CATEGORY:	DOCUMENTATION
BOILER REGISTRATION NO:	BB 3203
FINDING: Necessary technical documents 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 log book, 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-16
CATEGORY:	DOCUMENTATION
BOILER REGISTRATION NO:	BB 3205
FINDING: Necessary technical documents 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 log book, 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-17
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 9570
FINDING: The control panel cabinet does not specify the names of all boiler interlock alarm functions.	
RECOMMENDATION: Names of boiler interlock alarm functions should be specified on the cabinet.	
PRIORITY:	P4
REMEDIATION TIME FRAME:	3 MONTHS

FINDING NO:	B-18
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 9570
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-19
CATEGORY:	MONITORING AND CONTROL SYSTEM
BOILER REGISTRATION NO:	BB 9570
FINDING: There is no drainage available for water level gauge glass	
RECOMMENDATION: A suitable discharge pipe shall be fitted with each water gauge drain cock or valve	
PRIORITY:	P3
REMEDIATION TIME FRAME:	2 MONTHS

FINDING NO:	B-20
CATEGORY:	AIR VENT
BOILER REGISTRATION NO:	BB 9570
FINDING: The boiler air vent line was not directed to the outside of the boiler room.	
RECOMMENDATION: The boiler vent line should be directed outside of the boiler room with proper support.	
PRIORITY:	P2
REMEDIATION TIME FRAME:	1 MONTH

FINDING NO:	B-21	
CATEGORY:	MONITORING AND CONTROL SYSTEM	
BOILER REGISTRATION NO:	BB 13288	
FINDING: There is no drainage available for water level gauge glass		
RECOMMENDATION: Drainage arrangement must be installed for all safety valves as per manufacturer published guideline or at the lowest point of outlet line.		
PRIORITY:	P3	
REMEDIATION TIME FRAME:	2 MONTHS	

FINDING NO:	B-22	
CATEGORY:	FUEL SYSTEM	
BOILER REGISTRATION NO:	BB 13288	
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	

2. INTERNAL INSPECTION & HYDROSTATIC PRESSURE TEST INSPECTION

Inspection Date	Boiler Registration Number	Author(s)
28-Aug-25	BB 13288	Md. Mahfuzul Kabir
28-Oct-25	BB 9570	Nazmul Hasan

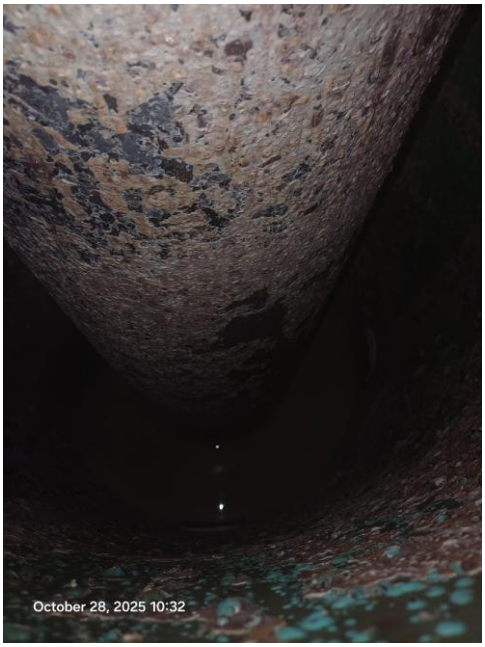
Reviewed by : Md. Asfaquzzaman

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-23
CATEGORY:	SCALES AND DEPOSITS
BOILER REGISTRATION NO:	BB 9570
FINDING: Salt and thin scale (1~1.5 mm) formation was observed on the waterside.	
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)
26-Oct-25	BB 13288	Faisal Bin Faruk
10-Dec-25	BB 9570	Mushfiq Ibne Kader

Reviewed by : Md. Asfaquzzaman

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-24	
CATEGORY:	MONITORING AND CONTROL SYSTEM	
BOILER REGISTRATION NO:	BB 13288	
FINDING: The Steam Pressure Limiter was missing.		
RECOMMENDATION: Steam Pressure Limiter should be installed and kept functional.		
PRIORITY:	P1	
REMEDIATION TIME FRAME:	1 MONTH	

FINDING NO:	B-25	
CATEGORY:	MONITORING AND CONTROL SYSTEM	
BOILER REGISTRATION NO:	BB 13288	
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-26	
CATEGORY:	MONITORING AND CONTROL SYSTEM	
BOILER REGISTRATION NO:	BB 9570	
FINDING: The Steam Pressure Limiter was missing.		
RECOMMENDATION: Steam Pressure Limiter should be installed and kept functional.		
PRIORITY:	P1	
REMEDIATION TIME FRAME:	1 MONTH	

FINDING NO:	B-27	
CATEGORY:	MONITORING AND CONTROL SYSTEM	
BOILER REGISTRATION NO:	BB 9570	
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	