



Work Order No.	PWO371731	Schedule Month	March 2018
Work Order Date	01/03/2018	Completed Date	21/3/2018
Clinic Name	Klinik Pergigian Sekolah Kebangsaan F	Clinic Code	WPL002
BE No.	WPL000077	Distict	LABUAN
BE Category	Sterilizing Units, Steam	WO Assigned to	Ashmawi
Ownership	<input checked="" type="checkbox"/> Existing Equipment	<input type="checkbox"/> Purchase	<input type="checkbox"/> New
BE Condition	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> BER Proposed	
Work Order Type	<input type="checkbox"/> Preventive Maintenance (PM)	<input type="checkbox"/> Third Party Calibration (TPC)	
	<input type="checkbox"/> Routine Inspection (RI)	<input type="checkbox"/> Statutory Certification (SC)	

Reschedule Date	
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BE Third Party Calibration / Statutory Certification Details			
Company Name	NA	Cal / Cert Date	
Contact Number		Cal / Cert Expiry Date	NA

Action Taken
checked physical all ok. clean body interior and exterior, tested run ok and fix to use. ppm completed.

PPM CARRIED OUT AS PER CHECKLIST

Schedule Maintenance Execution Details				
SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
	MOHD. ASHMAWI B MOHD HISHAM BIOMEDICAL TECHNICIAN, QMS 019-2634231	21/3/2018	11.00 am	12.00 pm

Customer Remarks	
Engineer / Technician Signature Name Date MOHD. ASHMAWI B MOHD HISHAM BIOMEDICAL TECHNICIAN, QMS 019-2634231 21/3/2018	Customer Signature Name Designation Date Seal HERMAN NOWI Juruteknologi Pergigian Klinik Pergigian Labuan 20/4/18



For Internal Use

First Verification
QMS Circle Incharge

JULIUS HANSUN
BIOMEDICAL ENGINEER, QMS
019-3620179

Final Verification
QMS State Incharge

DIKRY LITE
SABAH STATE MANAGER
MANAGER, S. SUTUNG SDN BHD



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BEMS Planned Preventive Maintenance Checklist

Sterilizing units, Steam

BE CODE : 13-746

CHECKLIST NO: CL-148
REV.000

PART 1 ASSET DETAILS

WORK ORDER NO ▶ Pw0 371731 ASSET NO ▶ Wp1000077
MANUFACTURER ▶ N14 MODEL ▶ N12
FREQUENCY ▶ 3 MONTHLY () 6 MONTHLY () 12 MONTHLY (X) PPM HOURS ▶ 1.0

PART 2 SPECIAL PRECAUTION

If there is evidence of body fluid contamination, submit the device for cleaning and decontamination before inspecting it.

Wear appropriate Personnel Protection Equipment (PPE) during work.

Wear grounded electrostatic wristband when handling PCB or electronic components.

Refer to the safety procedure for additional precautions and guidance as per manufacturer guidelines.

Make sure the test equipment used are duly calibrated.

PART 3 TEST APPARATUS

Tick (✓) where appropriate

NO	ASSET NO	DESCRIPTION	SERIAL NO	CALIBRATION DUE ON
	TESSA 0085	ELECTRICAL SAFETY ANALYZER	3227039	10/11/2019
	NA	PRESSURE METER	NA	NA
	NA	THERMOMETER	NA	NA

PART 4 QUALITATIVE TASKS

Tick (✓) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	(✓)	()	()	9 Over pressure cut of valve - Verify physical integrity	(✓)	()	()
2 Power Cord - verify proper insulation and integrity	(✓)	()	()	10 Door lock - Verify physical integrity	(✓)	()	()
3 Strain Relief - verify physical integrity at both ends of line cord	(✓)	()	()	11 Door gasket Verify physical integrity	(✓)	()	()
4 Fittings/ Connectors - check all fittings/connectors	(✓)	()	()	12 Check water tank leak	(✓)	()	()
5 Controls/Switches - verify proper operation of controls	(✓)	()	()	13 Check drain valve -Physical integrity	(✓)	()	()
6 Indicators/ Displays - verify proper illumination and operation	(✓)	()	()	14 Check label	(✓)	()	()
7 Check fuse, circuit breaker	(✓)	()	()	15 Calibration	()	()	(✓)
8 Heater - verify physical Integrity	(✓)	()	()				

PART 5 PREVENTIVE MAINTENANCE TASKS

Tick (✓) where appropriate

	DONE	NOT DONE **	NA		DONE	NOT DONE **	NA
1 Clean exterior and interior of the equipment	(✓)	()	()	4 Lubricate all moving parts	(✓)	()	()
2 Check / replace gasket ***	(✓)	()	()	Notes: * For all Parts, NA is defined as NOT APPLICABLE ** If you have ticked 'NOT DONE', then justify in Part 8 *** Choose Whichever Applicable			
3 Check/ clean solenoids	(✓)	()	()				



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rw 6371731

PART 6 SERVICE CHECKLIST

No	Description	Checked	Service/ Clean	Replaced	Not Applicable	No	Description	Checked	Service/ Clean	Replaced	Not Applicable
1	Fuse 2A-Transformer	(/)	()	()	()	17	Pressure Transducer	(/)	()	()	()
2	Fuse 2A-PC Board	(/)	()	()	()	18	Pressure Gauge	(/)	()	()	()
3	Fuse 2A-Main Supply	(/)	()	()	()	19	Safety Valve	(/)	()	()	()
4	Fuse Relay Board 5A & 2A	(/)	()	()	()	20	Air Valve/Steam Solenoid Valve	(/)	()	()	()
5	Transformet	(/)	()	()	()	21	Discharge Valve	(/)	()	()	()
6	Printed Circuit Board	()	()	()	(/)	22	Infill Valve	(/)	()	()	()
7	Main Control Board	(/)	()	()	()	23	Heating Element	(/)	()	()	()
8	Control Board	(/)	()	()	()	24	Heat Exchanger	(/)	()	()	()
9	Fan Running Rear & Side	()	()	()	(/)	25	Vacuum Pump	(/)	()	()	()
10	Battery Heater Dry Cycle	(/)	()	()	()	26	Door Gasket	(/)	()	()	()
11	Water Reservoir Float Switch	(/)	()	()	()	27	Silicone Washer	(/)	()	()	()
12	Water Level Sensor	(/)	()	()	()	28	O Ring	(/)	()	()	()
13	Water Reservoir	(/)	()	()	()	29	Chamber Guard Seal	(/)	()	()	()
14	Electric Door Lock	(/)	()	()	()	30	Solid State Relay	(/)	()	()	()
15	Pressure Door Lock	(/)	()	()	()	31	Thermostat Assembly	(/)	()	()	()
16	Discharge Door Lock	(/)	()	()	()	32	Water Filter	()	()	()	(/)

PART 7 Technician Remarks



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PART 8 QUANTITATIVE TASKS

Tick (✓) where appropriate

No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS	FAIL	NA
1	Temperature reading	°C		NA		()	()	(✓)
2	Pressure reading	psi		NA		()	()	(✓)

PART 9 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

(In accordance to IEC 60601)



PASS



FAIL



NA

PART 10 NOTES



CORRECTIVE MAINTENANCE REQUIRED



FUNCTIONING



NOT FUNCTIONING

WORK ORDER NO ▶

NA

NEXT PPM DATE ▶

20/3/2019

PPM has been performed in accordance to the checklist and the equipment is functioning to the intended purpose.

COMPLETED BY:

MOHD. ASHMAWI B MOHD HISHAM
BIOMEDICAL TECHNICIAN, QMS
019-2634231

DATE:

21/3/2018

Fluke Biomedical

Date 21/03/2018

Test Setup

Operator ID LBNBME
Calibration Tech
Calibration Date 10/01/2019
Firmware Version 2.08.01
Serial Number 32270 21
Date & Time 21/03/2018 & 11:08
JOB Name

DUT Information

Equipment Number WPL 000077
Serial Number
Manufacturer
Model
Location KLINIK PERGIGIAN
Other

Template Information

Template Name STERILIZING UNITS
Pause after Power ON NO
Power ON delay 2
Test Speed RAPID
Halt on Test Failure YES
Include Time YES
Insulation Resistance Voltage 250V
Multi Enclosure Test NO

Standard IEC62353-Differential
Pause before Power OFF NO
Power OFF delay 0
Test Mode AUTO
Multi PE Test NO
Multi Resstore WORST/LAST
Reverse Polarity YES
Classification I

PLC Configuration-Applied part setup

AP Name AP Type AP Num

ESA615 Test Results

Test Name	Value	High Limits	Low Limits	Status
Protective Earth Resistance	0.21 Ohm	0.3	-	P
Insulation Resistance				P
Mains to Protective Earth	999 MOhm	-	-	P
Mains Voltage				P
Live to Neutral	241.4 V	-	-	P
Live to Earth	12.1 V	-	-	P
Neutral to Earth	240.3 V	-	-	P
Equipment Current	10.2 A	-	-	P
Differential Leakage				P
Normal Condition	46 uA	500	-	P
Normal Condition-Reversed mains	57 uA	500	-	P

Signature

MOHD. ASHMANI B MOHD NISHAM
BIOMEDICAL TECHNICIAN, GMS
010-2834231