

## Form B03

## Scheduled Maintenance Work Order



Quantum Medical Solutions sdn bhd  
transcending boundaries, transforming life

Format Ref: - QMS/TSD-022 Rev.01

Work Order No.	PWO371794	Schedule Month	March 2018
Work Order Date	01/03/2018	Completed Date	27/3/2018
Clinic Name	Klinik Pergigian Sekolah Rendah Jenis	Clinic Code	WPL004
BE No.	WPL000050	Distict	LABUAN
BE Category	Sterilizing Units, Steam	WO Assigned to	Che Muhammad Atillah
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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<b>BE Third Party Calibration / Statutory Certification Details</b>			
Company Name	NA	Cal / Cert Date	NA
Contact Number		Cal / Cert Expiry Date	

**Action Taken**

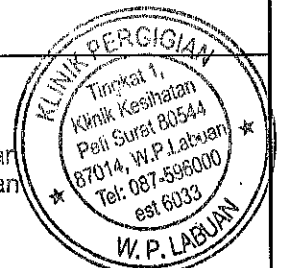
↳ Check chassis, fittings, cables, PCB Board, fuse, Door lock lock, gasket door and valve.

↳ Clean exterior and interior then do some alignment.

↳ Deep Reflow test, unit running well (Functioning 600)

Schedule Maintenance Execution Details				
SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
	CHE MUHAMMAD ATILAH BIOMEDICAL TECHNICIAN, QMS 019-2572040	27/3/2018	1000	1100


Customer Remarks	
Engineer / Technician Signature Name Date CHE MUHAMMAD ATILAH BIOMEDICAL TECHNICIAN, QMS 019-2572040 27/3/2018	Customer Signature Name Designation Date Seal HERMAN NOWI Juruteknologi Pergigian Klinik Pergigian Labuan 27/4/18




For Internal Use

First Verification  
QMS Circle Incharge  
JULIUS HANSUN  
BIOMEDICAL ENGINEER, QMS  
019-3620179

Final Verification  
QMS State Incharge  
DICKY LEE  
SASAN STATE MANAGER  
QMS STATE INCHARGE


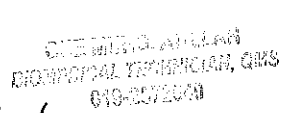
 Quantum Medical Solutions sdn bhd <small>transforming businesses, transforming life</small>	<b>Quantum Medical Solutions Sdn Bhd</b> BEMS Planned Preventive Maintenance Checklist <b>Sterilizing units, Steam</b> BE CODE : 13-746	CHECKLIST NO: CL-148 REV.000					
<b>PART 1 ASSET DETAILS</b>							
WORK ORDER NO ▶ PWO 371794		ASSET NO ▶ W1000050					
MANUFACTURER ▶ mlk		MODEL ▶ N11					
FREQUENCY ▶ 3 MONTHLY ( ) 6 MONTHLY (✓) 12 MONTHLY ( )		PPM HOURS ▶ 1.0					
<b>PART 2 SPECIAL PRECAUTION</b>							
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.							
<b>PART 3 TEST APPARATUS</b>							
Tick (✓) where appropriate							
NO	ASSET NO	DESCRIPTION	SERIAL NO	CALIBRATION DUE ON			
	TESA0085	ELECTRICAL SAFETY ANALYZER	3227039	18/1/2019			
	NA	PRESSURE METER	NA	NA			
	NA	THERMOMETER	NA	NA			
<b>PART 4 QUALITATIVE TASKS</b>							
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	(✓)	( )	( )				
<b>PART 5 PREVENTIVE MAINTENANCE TASKS</b>							
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	(✓)	( )	( )				

 <small>Quantum Medical Solutions sdn bhd transforming boundaries, transforming life</small>	<b>Quantum Medical Solutions Sdn Bhd</b> BEMS Planned Preventive Maintenance Checklist <b>Sterilizing units, Steam</b> BE CODE : 13-746	CHECKLIST NO: CL-148 REV.000
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WORK Order No	PWO 31794
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PART 6 SERVICE CHECKLIST											
No	Description	Checked	Service/ Clean	Replaced	Not Applicable	No	Description	Checked	Service/Ci ean	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

 Quantum Medical Solutions sdn bhd <small>transcending boundaries, redefining life</small>	<b>Quantum Medical Solutions Sdn Bhd</b> BEMS Planned Preventive Maintenance Checklist <b>Sterilizing units, Steam</b> <small>BE CODE : 13-748</small>	CHECKLIST NO: CL-148 REV.000						
WORK ORDER NO ▶ <u>pwg 37 179u</u>								
<b>PART 8 QUANTITATIVE TASKS</b>								
<small>Tick (✓) where appropriate</small>								
No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS	FAIL	NA
1	Temperature reading	°C		<u>NA</u>		( )	( )	(✓)
2	Pressure reading	psi		<u>NA</u>		( )	( )	(✓)
<b>PART 9 ELECTRICAL SAFETY TEST</b>								
ELECTRICAL SAFETY TEST, (attach report) <small>(In accordance to IEC 60601)</small> <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL <input type="checkbox"/> NA								
<b>PART 10 NOTES</b>								
Empty space for notes								
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> CORRECTIVE MAINTENANCE REQUIRED         </div> <div> <input checked="" type="checkbox"/> FUNCTIONING         </div> <div> <input type="checkbox"/> NOT FUNCTIONING         </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>           WORK ORDER NO ▶ <u>NA</u> </div> <div>           NEXT PPM DATE ▶ <u>26/3/2019</u> </div> </div>								
<small>PPM has been performed in accordance to the checklist and the equipment is functioning to the intended purpose.</small> <b>COMPLETED BY:</b> <div style="text-align: center;">   <small>GUE MIN GUAN          REGIONAL TECHNICIAN, QMS          019-2572600</small> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <b>DATE:</b> <u>27/3/2018</u> </div> </div>								

# Fluke Biomedical

Date 27/03/2018

## Test Setup

Operator ID LBNBME  
Calibration Tech  
Calibration Date 10/01/2019  
Firmware Version 2.08.01  
Serial Number 3227028  
Date & Time 27/03/2018 & 10:04  
JOB Name

## DUT Information

Equipment Number WPL 000050  
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 Restore 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	0.20 Ohm	0.3	-	P
Insulation Resistance				P
Mains to Protective Earth	999 MOhm	-	-	P
Mains Voltage				P
Live to Neutral	241.2 V	-	-	P
Live to Earth	12.4 V	-	-	P
Neutral to Earth	240.3 V	-	-	P
Equipment Current	11.2 A	-	-	P
Differential Leakage				P
Normal Condition	33 uA	500	-	P
Normal Condition-Reversed mains	49 uA	500	-	P

*act*  
Signature

QMS SYSTEMS LTD  
BIRMINGHAM  
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