

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.	PWO365287	Schedule Month	June 2018
Work Order Date	01/06/2018	Completed Date	26/6/18
Clinic Name	Klinik Pergigian Di Klinik Kesihatan Lok	Clinic Code	JHR523
BE No.	JHR008205	Distict	KOTA TINGGI
BE Category	Sterilizing Units, Portable	WO Assigned to	KTGBME2
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 checked="" 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	NA
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BE Third Party Calibration / Statutory Certification Details			
Company Name	NA	Cal / Cert Date	NA
Contact Number	NA	Cal / Cert Expiry Date	NA

Action Taken		Manufacturer : NA
<input checked="" type="checkbox"/> PM / RI job done as per checklist. Unit tested functioning good & ready to use.		Modal : NA
<input type="checkbox"/> Corrective Maintenance / <input type="checkbox"/> Breakdown		Serial No : NA
BE Sticker Availability : <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> NA		
Remarks:		

Schedule Maintenance Execution Details				
Sl No	QMS Engineer / Technician Name	Date	Start Time	End Time
1	Husni	26.6.18	1300	1400

Customer Remarks	- Ppm done as per checklist.
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Engineer / Technician Signature	Customer Signature
Name	Name
Date	Designation
MOHD ALHUSNI B. MAMAT	DR. AMIRUL FADZLI AZIZIE ANUAR
Biomedical Engineer	MDC NO: 6788
Quantum Medical Solutions S/B	PEGAUAI PERIGIAN
	KOTA TINGGI
	26/6/18

For Internal Use		
First Verification	MUHD RAMADHAN T. AMAR JAYA	Final Verification
QMS Circle Incharge	Biomedical Engineer	QMS State Incharge
	Technical Service Department	
	Quantum Medical Solutions Sdn. Bhd.	
	Tel: +60 12-396 1697	

**KEMENTERIAN KESIHATAN MALAYSIA**

MEET Planned Preventive Maintenance Checklist

Sterilizing units, Portable

BE CODE DE-031

CHECKLIST NO-CL-147-000
REV.001**PART 1 ASSET DETAILS**

WORK ORDER NO ▶ Pw0 365287

ASSET NO ▶ JHR008205

MANUFACTURER ▶ NA

MODEL ▶ NA

FREQUENCY ▶ 3 MONTHLY () 6 MONTHLY (/) 12 MONTHLY () PPM HOURS ▶ 1 HOUR

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
1	NA	DIGITAL TEMPERATURE PROBE	NA	NA
2	NA	DIGITAL PRESSURE METER	NA	NA
3	TERSA 0010	587	3210071	24.0.18

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 Waste Water Reservoir/Bottle - clean & verify integrity	(✓)	()	()
8 Heater - verify physical Integrity	(✓)	()	()				
9 Chamber/Cassette - verify physical integrity (scaling, rusting, pitting or							

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 ***	(✓)	()	()				
3 Check/ clean solenoids	(✓)	()	()				

Notes:

* For all Parts, NA is defined as NOT APPLICABLE

** If you have ticked 'NOT DONE', then justify in Part 8

*** Choose Whichever Applicable



KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist
Sterilizing units, Portable
BS CODE DE-031

CHECKLIST NO. CL 547-002 REV 001

WORK Order No

PWO 265087

PART 6 SERVICE CHECKLIST

No	Description	Checked	Service/ Clean	Replaced	Not Applicable	No	Description	Checked	Service/ Clean	Replaced	Not Applicable
1	Fuses	(✓)	()	()	()	16	Chamber Guard Seal (if applicable)	(✓)	()	()	()
2	Main Control Board	(✓)	()	()	()	17	Solid State Relay (if applicable)	()	()	()	(✓)
3	Fan Running Rear & Side (if applicable)	()	()	()	(✓)	18	Thermostat Assembly	(✓)	()	()	()
4	Clean Water Reservoir	(✓)	()	()	()	19	Thermal Printer (if applicable)	()	()	()	(✓)
5	Electric Door Lock	()	()	()	(✓)	20	Vacuum Pump (if applicable)	()	()	()	(✓)
6	Pressure Door Lock	(✓)	()	()	()	21	Temperature Sensor	(✓)	()	()	()
7	Discharge Door Lock	(✓)	()	()	()	22	Filters	()	()	()	(✓)
8	Pressure Transducer	()	()	()	(✓)						
9	Pressure Gauge	()	()	()	(✓)						
10	Safety Valve	()	()	()	(✓)						
11	Air Valve/Steam Solenoid Valve (if applicable)	()	()	()	(✓)						
12	Discharge Valve	()	()	()	(✓)						
13	Feed Water Valve (if applicable)	()	()	()	(✓)						
14	Heating Element	(✓)	()	()	()						
15	Door Gasket/Cassette Seal	(✓)	()	()	()						

PART 7 Technician Remarks



KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist
Sterilizing units, Portable
BE CODE : DE-031CHECKLIST NO: CL-147-000
REV.001

WORK ORDER NO ▶ PWO 265/287

PART 8 QUANTITATIVE TASKS

Tick (✓) where appropriate

No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS	FAIL	NA
1	Temperature reading	°C	134	134	134-137 121-124	✓	()	()
2	Pressure reading - non absolute pressure reading	bar	2.06	2.06	2.03-2.32 1.04-1.24	✓	()	()
3	Electrical Supply Voltage	V	240	refer to EST	Refer to Nameplate	✓	()	()
4	Electrical Power/Consumption	kW		refer to EST	Refer to Nameplate	✓	()	()

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 ▶ N/A

NEXT PPM DATE ▶ 12/18

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

COMPLETED BY:
Shalwana Binti Latip
Biomedical Engineer

WITNESSED BY:

DATE: 26/6/18
Quantum Medical Solutions Sdn. Bhd.
012-3952498

DATE:

Date :26/6/2018

Test Setup

Operator ID : QMS
Calibration Tech : MOHANA
Calibration Date : 24/8/2018
Firmware Version : 2.08.01
Serial Number : 3218071
Date & Time : 26/06/2018 & 13:35pm
JOB Name :

DUT Information

Equipment Number : JHR008205
Serial Number :
Manufacturer :
Model :
Location :
Other :

Template Information

Template Name : CLASS 1 NO PE
Pause after Power ON: NO
Power ON delay: 2
Test Speed: NORMAL
Halt on Test Failure: YES
Include Time: YES
Insulation Resistance \ 500V
Multi Enclosure Test : NO

Standard : IEC60601-1-2nd Ed
Pause before Power O NO
Power OFF delay: 0
Test Mode: AUTO
Multi PE Test: NO
Multi Resstore: WORST/LAST
Reverse Polarity: YES
Classification: I no PE

PLC Configuration-Applied part setup

AP Name AP Type AP Num

ESA615 Test Results

Test Name	Value	High Limits	Low Limits	Status
Insulation Resistance				P
Mains to Protective Earth	4.9 MOhm -	-	-	P
Mains to Non-Earth Accessible Conductive Par	999 MOhn -	-	-	P
Mains Voltage				P
Live to Neutral	234.5 V -	-	-	P
Neutral to Earth	0.5 V -	-	-	P
Live to Earth	230.5 V -	-	-	P
Equipment Current	0.0 A -	-	-	P
Earth Leakage Current				P
Normal Condition	17.0 uA-OI	500 -	-	P
Open Neutral	148.6 uA-C	1000 -	-	P
Open Neutral- Reversed Mains	147.2 uA-C	1000 -	-	P
Normal Condition- Reversed Mains	135.9 uA-C	500 -	-	P
Enclosure Leakage Current				P