

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.	PWO365255	Schedule Month	June 2018
Work Order Date	01/06/2018	Completed Date	20.6.18
Clinic Name	Klinik Pergigian Di Klinik Kesihatan Sui	Clinic Code	JHR549
BE No.	JHR003136	Distict	LEDANG
BE Category	Sterilizing Units, Steam	WO Assigned to	IZUAN
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	-	Cal / Cert Date	-
Contact Number	-	Cal / Cert Expiry Date	-
Action Taken			
<input checked="" type="checkbox"/> PM / RI job done as per checklist. Unit tested functioning good & ready to use.		Manufacturer: STURDY	
<input checked="" type="checkbox"/> Corrective Maintenance / <input type="checkbox"/> Breakdown		Modal: SA260MA	
BE Sticker Availability: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> NA		Serial No: 080229004-015	
Remarks:			

Schedule Maintenance Execution Details				
SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
1	IZUAN	20.6.18	10.00	11.00

Customer Remarks

Engineer / Technician Signature	Customer Signature
Name: IZUAN	Name: AZLEE YASRI
Date:	Designation: JURUTEKNOLOGI PERGIGIAN U29
	Date: 20/6/18
	Seal: KLINIK PERGIGIAN : PERKUTAN

For Internal Use

First Verification
QMS Circle Incharge

MUHD SHAIFUDIN BIN SIMIN
Biomedical Engineering
Quantum Medical Solutions
HP: 012-3967638

Final Verification
QMS State Incharge



KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist
Sterilizing units, Steam
BE CODE : 13-746

CHECKLIST NO: CL-148-000
REV.001

PART 1 ASSET DETAILS

WORK ORDER NO ▶ PW0365255 ASSET NO ▶ JHR003136
MANUFACTURER ▶ GENERAL MODEL ▶ GENERAL
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)	TEESA0025	DIGITAL TEMPERATURE METER	29520201WS	26/12/2018
2)	TEESA0330	DIGITAL PRESSURE METER	H-315545	8/11/2018

PART 4 QUALITATIVE TASKS

Tick (✓) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	(✓)	()	()	10 Over pressure cut of valve - Verify physical integrity	(✓)	()	()
2 Power Cord - verify proper insulation and integrity	(✓)	()	()	11 Door lock - Verify physical integrity	(✓)	()	()
3 Strain Relief - verify physical integrity at both ends of line cord	(✓)	()	()	12 Door gasket Verify physical integrity	(✓)	()	()
4 Fittings/ Connectors - check all fittings/connectors	(✓)	()	()	13 Check water tank leak	(✓)	()	()
5 Controls/Switches - verify proper operation of controls	(✓)	()	()	14 Check drain valve -Physical integrity	(✓)	()	()
6 Indicators/ Displays - verify proper illumination and operation	(✓)	()	()	15 Check label	(✓)	()	()
7 Check fuse, circuit breaker	(✓)	()	()	16 Check demineralisation and sensor (if available)	(✓)	()	()
8 Heater - verify physical Integrity	(✓)	()	()	17 Check automatic water filling (if available)	(✓)	()	()
9 Chamber - verify physical integrity (scalling, rusting, pitting or impurities)	(✓)	()	()	18 Replace Bacteria/Air Sterilization Filter	()	()	(✓)

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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WORK Order No

PART 6 SERVICE CHECKLIST

No	Description	Checked	Service/ Clean	Replaced	Not Applicable	No	Description	Checked	Service/ Clean	Replaced	Not Applicable
1	Fuses	(/)	()	()	()	16	Discharge Valve	(/)	()	()	()
2	Main Control Board	(/)	()	()	()	17	Infill Valve	(/)	()	()	()
3	Control Board	(/)	()	()	()	18	Heating Element	(/)	()	()	()
4	Fan Running Rear & Side	(/)	()	()	()	19	Heat Exchanger/Cooling system (if applicable)	(/)	()	()	()
5	Water Reservoir Float Switch/Water Level Sensor	(/)	()	()	()	20	Vacuum Pump	(/)	()	()	()
6	Water Reservoir	(/)	()	()	()	21	Door Gasket	(/)	()	()	()
7	Electric Door Lock	(/)	()	()	()	22	Chamber Guard Seal (if applicable)	(/)	()	()	()
8	Pressure Door Lock	(/)	()	()	()	23	Solid State Relay	(/)	()	()	()
9	Discharge Door Lock	(/)	()	()	()	24	Thermostat Assembly	(/)	()	()	()
10	Pressure Transducer	(/)	()	()	()	25	Temperature Sensor	(/)	()	()	()
11	Pressure Gauge	(/)	()	()	()	26	Thermal Printer (if applicable)	()	()	()	(/)
12	Safety Valve	(/)	()	()	()	27	Vacuum Pump (if applicable)	(/)	()	()	()
13	Air Valve/Steam Solenoid Valve	(/)	()	()	()	28	Filters / strainer	(/)	()	()	()
14	Air Valve/Steam Solenoid Valve	(/)	()	()	()						
15	Air Valve/Steam Solenoid Valve	(/)	()	()	()						

PART 7 Technician Remarks

NA



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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	134°C	135°C	134-137 121-124	(✓)	()	()
2	Pressure reading	bar	2.10	2.21	2.03-2.32 1.03-1.23	(✓)	()	()
3	Electrical Supply Voltage	V		refer to EST	Refer to nameplate	(✓)	()	()
4	Electrical Power	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

NA

☐ 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:

MOHD IZUAN BIN ZAKARIA
Technical Service Department
Quantum Medical Solution Sdn. Bhd.

DATE :

WITNESSED BY USER:

AZLEE YASIN
JURUTEKNOLOGI PERGIGIAN U29
KLINIK PERGIGIAN : 20/11/18

DATE :

Date :20/6/2018

Test Setup

Operator ID :
Calibration Tech : NADIA
Calibration Date : 25/8/2018
Firmware Version : 2.08.01
Serial Number : 3246911
Date & Time : 20/06/2018 & 10:00 A.M
JOB Name :

DUT Information

Equipment Number : JHR 003136
Serial Number : 080229004-015
Manufacturer : STURDY
Model : SA-260 ma
Location : KP SUNGAI MATI
Other :

Template Information

Template Name : 62353-Alt.STERILIZING
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 : IEC62353-Direct
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

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	0.26 Ohm	0.3	-	P
Insulation Resistance				P
Mains to Protective Earth	78.2 MOhm	-	-	P
Mains Voltage				P
Live to Neutral	241.3 V	-	-	P
Neutral to Earth	1.9V	-	-	P
Live to Earth	240.5V	-	-	P
Equipment Current	0.3 A	-	-	P
Direct Equipment Leakage				P
Open Earth	37.3 uA	500	-	P
Open Earth- Reversed Mains	57.8 uA	500	-	P

