

Form B03

Scheduled Maintenance Work Order

CLOSE



Quantum Medical Solutions sdn bhd
transcending boundaries, transforming life

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

Work Order No.	PWO371452	Schedule Month	June 2018
Work Order Date	01/06/2018	Completed Date	26/6/18
Clinic Name	Klinik Kesihatan Tanjung Sedili	Clinic Code	JHR048
BE No.	JHNANE016/	Distict	KOTA TINGGI
BE Category	ANALYZERS, LABORATORY, HEM	WO Assigned to	K. Tun M. El
Ownership	<input type="checkbox"/> Existing Equipment	<input type="checkbox"/> Purchase	<input checked="" 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	N/A
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BE Third Party Calibration / Statutory Certification Details

Company Name		Cal / Cert Date	
Contact Number		Cal / Cert Expiry Date	
Action Taken		Manufacturer : Mindray	
<input checked="" type="checkbox"/> PM / RI job done as per checklist. Unit tested functioning good & ready to use.		Model : BC-30s	
<input type="checkbox"/> Corrective Maintenance / <input type="checkbox"/> Breakdown		Serial No : TH-76002311	
BE Sticker Availability : <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> NA			
Remarks : N/A			

Schedule Maintenance Execution Details

S/No	QMS Engineer / Technician Name	Date	Start Time	End Time
N/A	Shelwano	26/6/18	9am	930

Customer Remarks

N/A

Engineer / Technician Signature	Customer Signature
Name	Name
Date	Designation
	Date
	Seal

MOORSHALWANA BINTI LATIP
 Biomedical Engineer
 Quantum Medical Solutions Sdn. Bhd.
 012-3962428
 26/6/18

GEVELAN ANAK JIHOB
 JURUTEKNOLOGI MAXIMAL PERUBATAN (J2)
 KLINIK KESIHATAN TANJUNG SEDILI
 83310 KOTA TINGGI, JOHOR.
 26/6/18

For Internal Use

First Verification
QMS Circle Incharge

MUHD RAMADHAN B. TAMAR JAYA
 Biomedical Engineer
 Technical Service Department
 Quantum Medical Solutions Sdn. Bhd.
 Tel: +60 12-396 1637

Final Verification
QMS State Incharge



KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist
Analyzers, Laboratory, Hematology, Cell Counting, Automated (Medium)
BE CODE ME-008

CHECKLIST NO: CL-015-000
REV.000

PART 1 ASSET DETAILS

WORK ORDER NO ▶ PWD 571452 BE NO ▶ JHNAW016
MANUFACTURER ▶ Beckman Mindray MODEL ▶ BL-305
FREQUENCY ▶ 6 MONTHLY (/) 12 MONTHLY () PPM HOURS ▶ 2.00

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.	TEESA-0010	ELECTRICAL SAFETY ANALYZER	3218071	11/8/18

PART 4 QUALITATIVE TASKS

Tick (✓) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	(/)	()	()	11 Probes- Verify physical integrity	(/)	()	()
2 Mount/ Fasteners - verify physical integrity	(/)	()	()	12 Temperature system- verify proper operation	(/)	()	()
3 Power Cord - verify proper insulation and integrity	(/)	()	()	13 Fan/motor/compressor/pump- verify physical integrity and proper operation	(/)	()	()
4 Strain Relief - verify physical integrity at both ends of line cord	(/)	()	()	14 Initialization Process- Verify	(/)	()	()
5 Fittings/ Connectors - check all fittings/connectors	(/)	()	()	15 Printer - Verify physical operation.	(/)	()	()
6 Controls/Switches - verify proper operation of controls	(/)	()	()	16 User Setting - Verify Operation	(/)	()	()
7 Indicators/Displays- verify proper operation	(/)	()	()	17 User calibration - Verify Operation	(/)	()	()
8 Electrodes and Transducer -verify physical integrity	(/)	()	()	18 Self Diagnostic - Verify Operation	(/)	()	()
9 Hydraulics and Pneumatics System-verify physical integrity	(/)	()	()	19 Plate movement calibration - Verify Operation	(/)	()	()
10 Sensors- 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	(/)	()	()	6 Clean measuring area	(/)	()	()
2 Inspect/clean interior of unit	(/)	()	()	7 Calibrate system parameter	()	()	(/)
3 Clean hydraulics and pneumatic system	(/)	()	()	8 Perform Post routine	(/)	()	()
4 Tubings - clean/ replace ***	(/)	()	()				
5 Clean sampling mechanism	(/)	()	()				

Notes:

* For all Parts, NA is defined as NOT APPLICABLE

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

*** Choose Whichever Applicable

WORK ORDER NO. ▶

PWD 371452

PART 6 QUANTITATIVE TASKS

Tick (✓) where appropriate

[illegible]

PART 7 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

Tick (✓) where appropriate

Standard use :

Result :

☒ IEC 60601

☐ IEC 61010

☐ IEC 62353

☒ PASS☐ FAIL☐ NA

PART 8 NOTES

☐ CORRECTIVE MAINTENANCE REQUIRED☒ FUNCTIONING☐ NOT FUNCTIONING

WORK ORDER NO. ▶

VIA

NEXT PPM DATE 12/2018

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

COMPLETED BY:

NOORSHALWANA BINTI LATIP

Biomedical Engineer

Quantum Medical Solutions Sdn. Bhd

012-3962428

DATE: _____

Me

2/6/18

Test Setup

Operator ID :
 Calibration Tech : MOHANA
 Calibration Date : 11/8/2018
 Firmware Version : 2.08.01
 Serial Number : 3218071
 Date & Time : 26/06/2018 & 9:20am
 JOB Name :

DUT Information

Equipment Number : JHNANE016
 Serial Number :
 Manufacturer :
 Model :
 Location : KK TG SEDILI
 Other :

Template Information

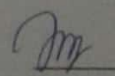
Template Name :		Standard :	IEC60601-DIRECT
Pause after Power ON:	NO	Pause before Power OFF:	NO
Power ON delay:	2	Power OFF delay:	0
Test Speed:	NORMAL	Test Mode:	AUTO
Halt on Test Failure:	YES	Multi PE Test:	NO
Include Time:	YES	Multi Resstore:	WORST/LAST
Insulation Resistance Voltage	500V	Reverse Polarity:	YES
Multi Enclosure Test :	NO	Classification:	I

PLC Configuration-Applied part setup

AP Name	AP Type	AP Num
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ESA615 Test Results

Test Name	Value	High Limits	Low Limits	Status
Protective Earth Resistance	0.361 Ohm		0.2 -	F
Insulation Resistance				P
Mains to Protective Earth	49.0 MOhm		-	P
Mains to Non-Earth Accessible Conductive Part	999 MOhm		-	P
Mains Voltage				P
Live to Neutral	259.5 V	-	-	P
Neutral to Earth	5.4 V	-	-	P
Live to Earth	254.0 V	-	-	P
Equipment Current	0.0 A	-	-	P
Earth Leakage Current				P
Normal Condition	50.6 uA-OP		500 -	P
Open Neutral	58.9 uA-OP		1000 -	P
Open Neutral- Reversed Mains	27.4 uA-OP		1000 -	P
Normal Condition- Reversed Mains	15.4 uA-OP		500 -	P
Enclosure Leakage Current				P
Normal Condition	0.6 uA-OP		100 -	P
Open Earth	1.1 uA-OP		500 -	P
Open Neutral	0.7 uA-OP		500 -	P
Open Neutral- Reversed Mains	0.7 uA-OP		500 -	P
Normal Condition- Reversed Mains	0.6 uA-OP		100 -	P
Open Earth- Reversed Mains	0.7 uA-OP		500 -	P


 Signature