



Scheduled Maintenance Work Order

Work Order No	n/a PW0410505	Scheduled Month	January 2019
Work Order Date	n/a 01/01/2019	Completed Date	8/1/2019
Clinic Name	K.K.I.S PARIT BUNTAR	Clinic Code	PRK077
BE No	PRK030548	District	KERIAN
BE Category	HEMATOLOGY ANALYSER (M)	WO Assigned to	NEER ADARUL
Ownership	<input checked="" type="checkbox"/> Existing Equipment	<input type="checkbox"/> MEET Equipment	
BE Condition	<input type="checkbox"/> Under Warranty	<input type="checkbox"/> BER Proposed	
Work Order Type	<input checked="" type="checkbox"/> Preventive Maintenance (PM) <input type="checkbox"/> Routine Inspection (RI)	<input type="checkbox"/> Third Party Calibration (TPC) <input type="checkbox"/> Statutory Certification (SC)	

Reschedule Date	
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BE Third Party Calibration / Statutory Certification Details

Company Name	n/a	Cal / Cert Date	n/a
Contact Number	n/a	Cal / Cert Expiry Date	n/a

Action Taken

ppm completed as per checklist.
* GENERIC REAGENT HAS BEEN USING
FOR STROMATOLYSER AND DILUENT.
* REPLACED THE NEW RBC MIXING
CHAMBER DUE TO FAULTY

Manufacturer: Sysmex
Model: XP100
S/N: A1525
Purchase Date: 19/12/2015
Kewpa No: KKM/JKA/PRK0108-04
01/11/2016

Schedule Maintenance Execution Details

SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
1	ADARUL	8/1/2019	8:30	12:00

Customer Remarks

CHARTER & MATERIAL VOLUME INSUFFICIENT. NOT ABLE
TO RUN QC TEST.

Engineer / Technician Signature

Name: **NOOR AZARUL B AHAMAD**
PERAK LAB SPECIALIST
Quantum Medical Solution Sdn. Bhd.
No 10 B, Persiaan Greentown 32
Greentown Avenue, 30450 Ipoh, Perak
Tel/fax : 05-2461991 Hp : 012-39648013

Date: 8/1/2019

Customer Signature

Name: **NOR ASHIKHA BINTI HAZIZ**
Juruteknologi Makmal
Perubatan U29

Date: 8/1/2019

Seal: K

For Internal Use only

First Verification
QMS Circle InchargeFinal Verification
QMS State Incharge



KEMENTERIAN KESIHATAN MALAYSIA
MEET Planned Preventive Maintenance Checklist
Analyzers, Laboratory, Hematology, Cell Counting, Automated (Medium)
BE CODE : ME-009

CHECKLIST NO: CL-015-000
REV.000

PART 1 ASSET DETAILS

WORK ORDER NO ▶ *n/a* BE NO ▶ *PR16030548*
MANUFACTURER ▶ *Sysmex* MODEL ▶ *xp100*
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
	<i>- n/a -</i>	ELECTRICAL SAFETY ANALYZER	<i>- n/a -</i>	

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



KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist
Analyzers, Laboratory, Hematology, Cell Counting, Automated (Medium)
BE CODE : ME-009

CHECKLIST NO: CL-015-000 REV.000

WORK ORDER NO ▶ *n/a*

PART 6 QUANTITATIVE TASKS

Tick (✓) where appropriate

No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS	FAIL	NA
1.	BACKGROUND CHECK - AFTER ATTACHMENT							
2.	QC TEST							

PART 7 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

Tick (✓) where appropriate

Standard use :

☐ IEC 60601

☐ IEC 61010

☐ IEC 62353

Result :

☐ PASS

☐ FAIL

☒ NA

PART 8 NOTES

*NOT APPLICABLE FOR ELECTRICAL SAFETY TEST
DUE TO UNIT RUNNING UNDER SOFTWARE
BASE.



CORRECTIVE MAINTENANCE REQUIRED



FUNCTIONING



NOT FUNCTIONING

WORK ORDER NO ▶ *n/a*

NEXT PPM DATE ▶ *July 2019*

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

COMPLETED BY:

NOOR AZARUL B AHAMAD

PERAK LAB SPECIALIST

Quantum Medical Solution Sdn. Bhd

No 10 B, Persiaan Greentown 4c

Greentown Avenue, 30450 Ipoh, Perak

Tel/fax : 05-2461991 Hp : 012-39648613

DATE :

21/1/2019

ID. _____
--BLANK CHECK--
Date 08/01/2019
Time 11:40
Mode

WBC 0.1 $\times 10^9/\text{UL}$
RBC 0.00 $\times 10^6/\text{UL}$
HGB 0.0 g/dL
HCT 0.0 %
MCV --- fL
MCH --- pg
MCHC --- g/dL
PLT 1 $\times 10^9/\text{UL}$

LYM% --- %
MXD% --- %
NEUT% --- %
LYM# --- $\times 10^9/\text{UL}$
MXD# --- $\times 10^9/\text{UL}$
NEUT# --- $\times 10^9/\text{UL}$

RDW-SD --- fL
RDW-CV --- %
PDW --- fL
MPV --- fL
P-LCR --- %
PCT --- %

Residual CHW 0.066 $\times 10^9/\text{UL}$
of CHS --- $\times 10^9/\text{UL}$
of CHM --- $\times 10^9/\text{UL}$
of CHL --- $\times 10^9/\text{UL}$