***AUTHORIZATION*:**

This document is issued under the following authority:

ROLE	NAME	DESIGNATION	SIGNATURE	DATE
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APPROVE	SAMUEL N.	QC SUPERVISOR		

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I. Records of change

No.	Date	Details of Changes		Authorization
		Page	*Clause/sub-clause and comment*	*Name and Signature*

II Distribution/Circulation

Distribution of Controlled copies of this Operating Procedure is as shown below:

1) Copy number 01 - Calibration Technicians

2) Copy number 02 - Calibration team leader

3) Copy number 03 - QC Supervisor

III Abbreviations Used

KN	-	Koko Networks
QC	-	Quality Control
SOP	-	Standard Operating Procedure
KS	-	Kenya Standard
ISO	-	International Organization of Standardisation
IEC	-	International Electrotechnical Committee
CAL	-	Calibration
CDE	-	Calibration Data Entry

1. Purpose

This procedure describes the process that ensures the calibration datasheets records can be tracked and have the solution of the following challenges as far as Calibration Reports preparation is concerned. Below are the challenges

a) Missing Data sheets by the calibration technicians
b) Misplaced submitted datasheets at the data entry desk
c) Minimize Wastage of Printing hard papers
d) Data storage bulkiness (Having huge files of Datasheets, problematic when searching for a datasheet)
e) Calibration equipment maintenance
f) Calibration Technicians deviating from calibration procedures

2. S C O P E

This Application procedure applies to both field work and in house calibration activities. It is limited to only Collecting Calibration data as datasheets, but not Verifications or Validations.

3. REFERENCES

3.1. KS ISO/IEC 17025:2005: General requirements for the competence of Calibration and testing Laboratories

3.2 A-4/07, *Traceability of measuring and test equipment to National Standards (previously EAL-G12)*

3.3 EA-4/11, *Calibration and maintenance of measuring and test equipment in testing laboratories,* 1996.

3.4 NIS 37, *A guide to managing the configuration of computer systems (Hardware, software and firmware).*

3.5 EA/GA (98) 95, *Guidelines for the use of computers and computer systems in accredited laboratories*

4. DEFINITIONS

4.1 **Calibration -** The set of operations which establish, under specified conditions, the relationship between values indicated by a measuring instrument or measuring system and Corresponding known values. The results of a calibration permit the estimation of errors associated with the measurement equipment

4.2 **Calibration Verification -** Provides a means of determining that deviations between measured values and known values are within the limits of error defined during calibration. The results provide an indication that the instrument/system is working properly.

4.3 **Critical Laboratory Equipment** – Analytical instrumentation and equipment affecting the accuracy or precision of a test method.

4.4 **Performance Verification** – The confirmation of the reliability of a previously validated method(s) or equipment.

4.5 **Preventive maintenance** - program of routine actions such as cleaning, lubrication, adjusting, or testing to keep equipment ready for use. The most important effect of a preventative maintenance program is to ensure measurement system reliability.

4.6 **Quality Control Checks** – Periodic confirmation of the reliability of equipment and instrumentation

4.7 **Out-of-tolerance -** A condition in which a measured value of a measurement attribute lies outside the documented performance specifications for the attribute or a state in which one or more attributes of an item are not in conformance with documented performance specifications.

5 Principal Responsibilities

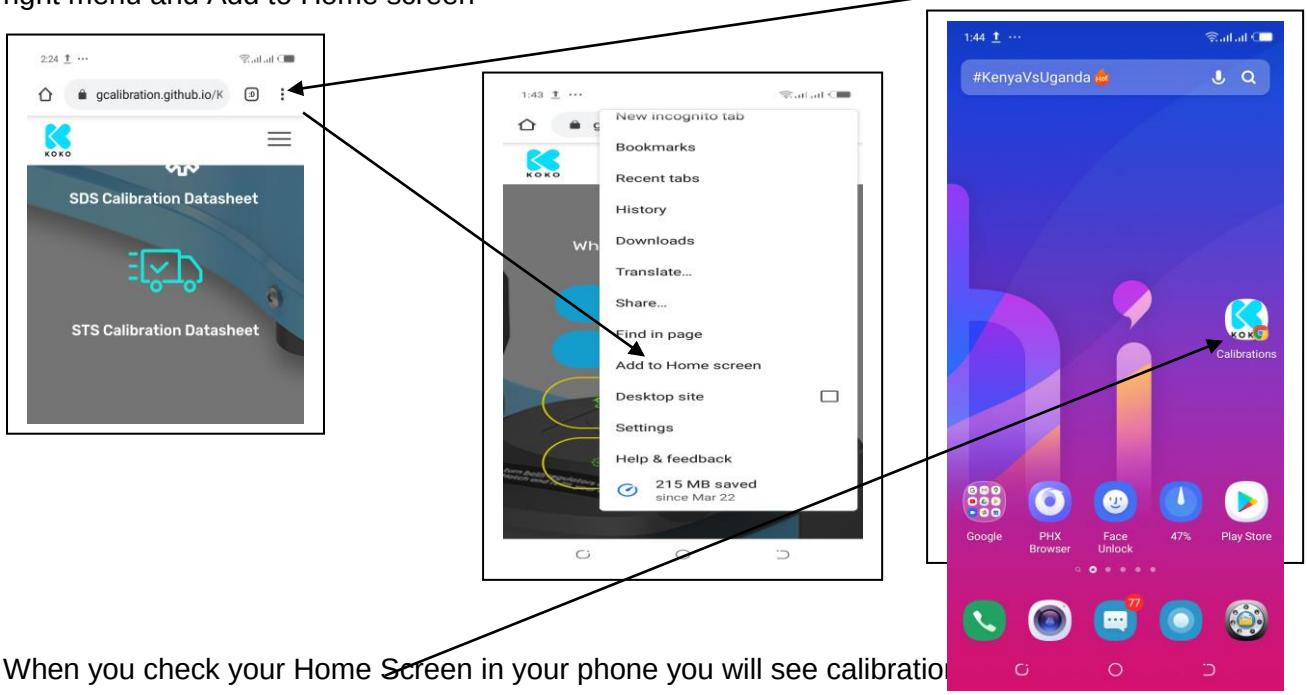
5.1 The Calibration team leader is responsible for ensuring that the objectives of this procedure are implemented.

5.2 The Calibration team leader is responsible for ensuring that the application is used in accordance with set guidance of calibration

5.3 All staff conducting Calibration are responsible for ensuring that data entry is done in accordance to this procedure.

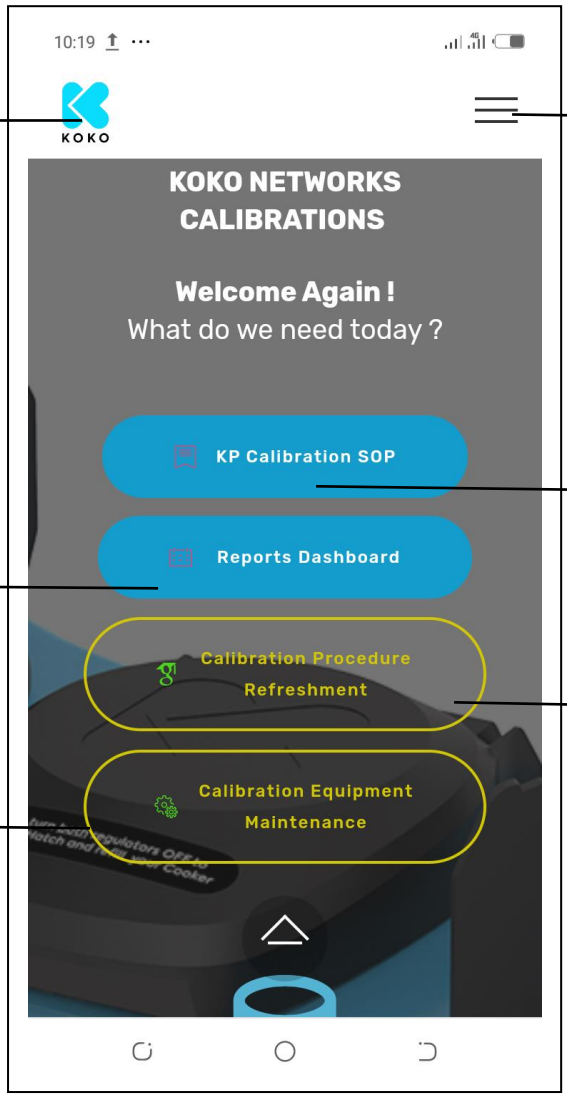
6.4 Use of Calibration Data Entry Application Procedure

6.4.1 In your internet browser, browse this link **gcalibration.github.io/KOKO** then click the top right menu and Add to Home screen



When you check your Home Screen in your phone you will see calibratio

6.2 Then click the calibration icon. You will see this page below. This is the home page of the application.



KOKO logo

Application Menu, you click it

Click if you want to read Calibration Procedure

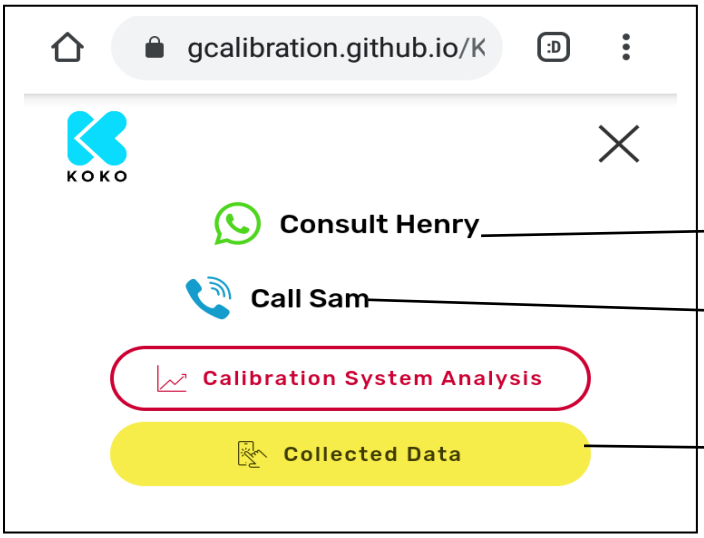
Click if you want KP, SDS.STS Datasheets

Click to access Calibration Procedure Refreshment Which you will be filling Twice a month

Click when giving Details on Calibration Equipment Maintenance

This should be Once a month

6.3 When you tap Application Menu



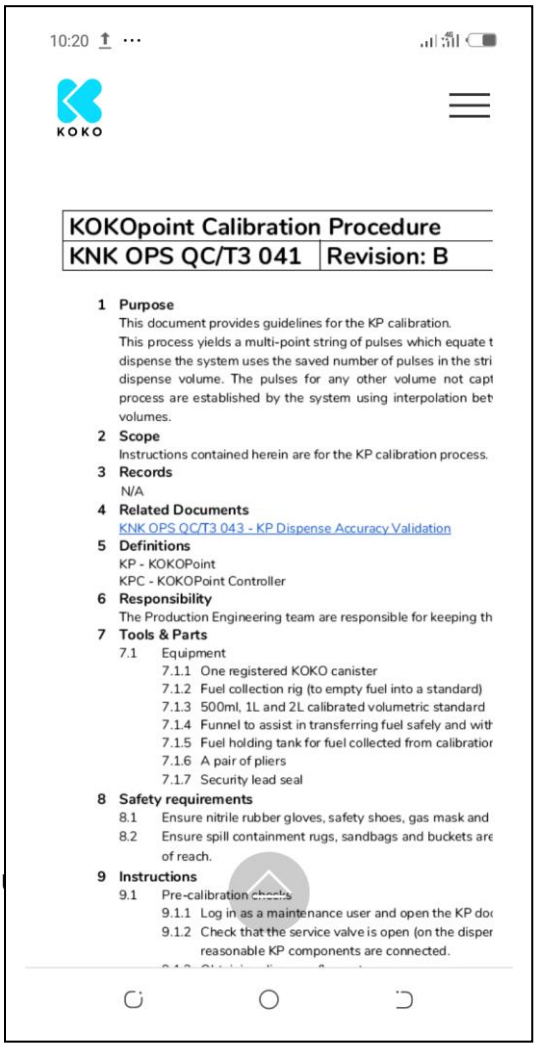
If you want to consult Henry you Click, it will direct you to Henry Whatsapp inbox

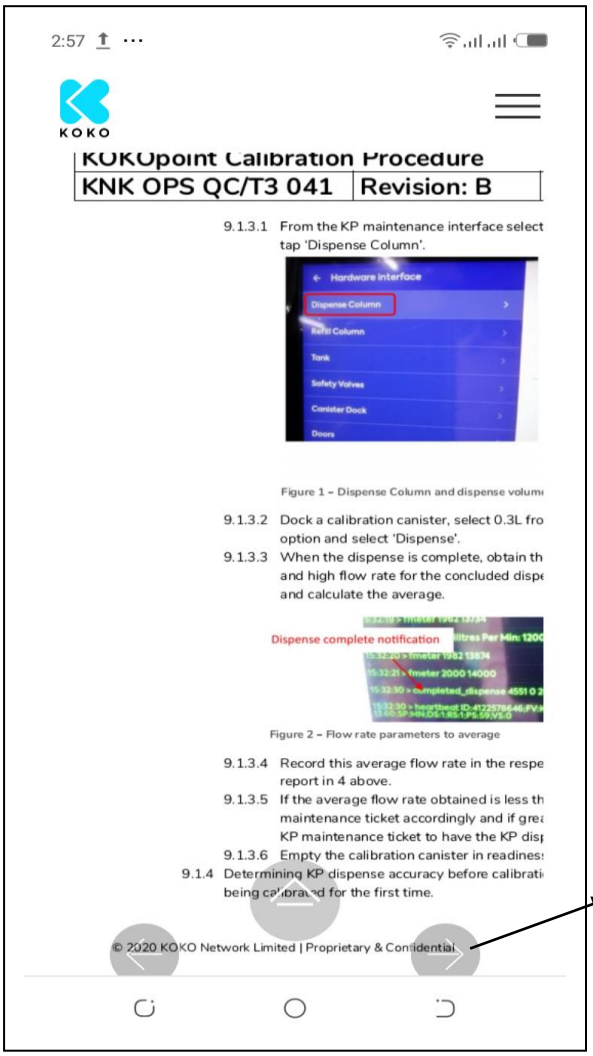
If you want to call Sam, you click

If you want to access the collected

Calibration Data from ALL Datasheets

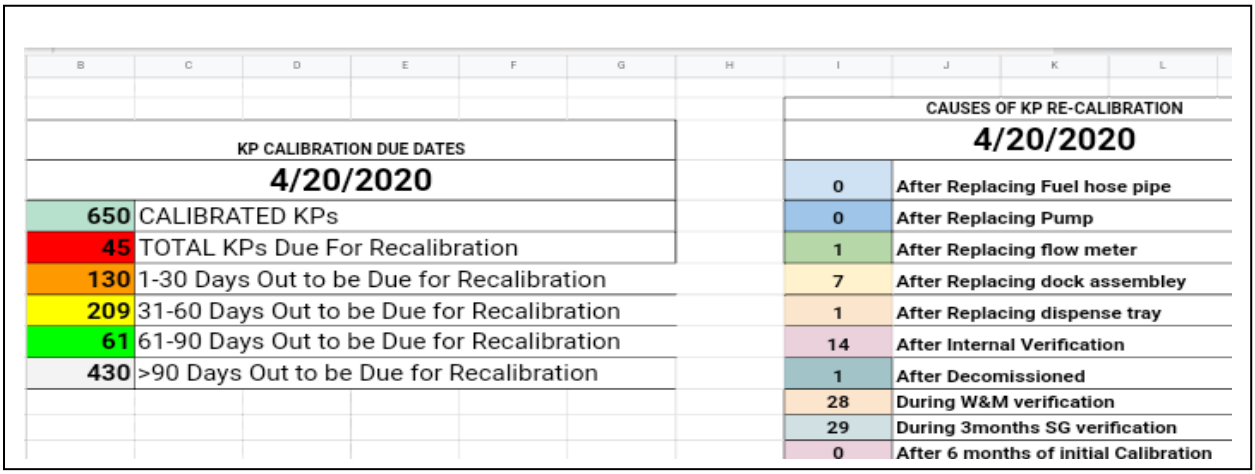
6.4 When you click KP calibration SOP you will see below, when you swipe the screen you go next page





Use arrows to go to next page

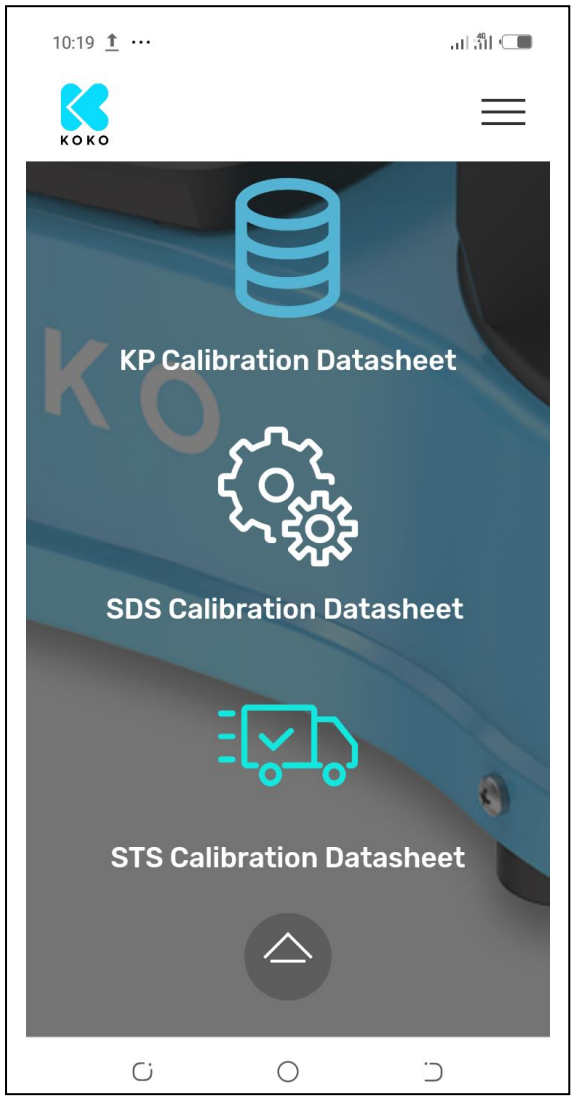
6.5 When you click Report Dashboard you able to see 1. Calibration reports in numbers at a glance 2. Reasons for Re-calibration in numbers. Reports are updated automatically every day.



KP CALIBRATION DUE DATES	
4/20/2020	
650	CALIBRATED KPs
45	TOTAL KPs Due For Recalibration
130	1-30 Days Out to be Due for Recalibration
209	31-60 Days Out to be Due for Recalibration
61	61-90 Days Out to be Due for Recalibration
430	>90 Days Out to be Due for Recalibration

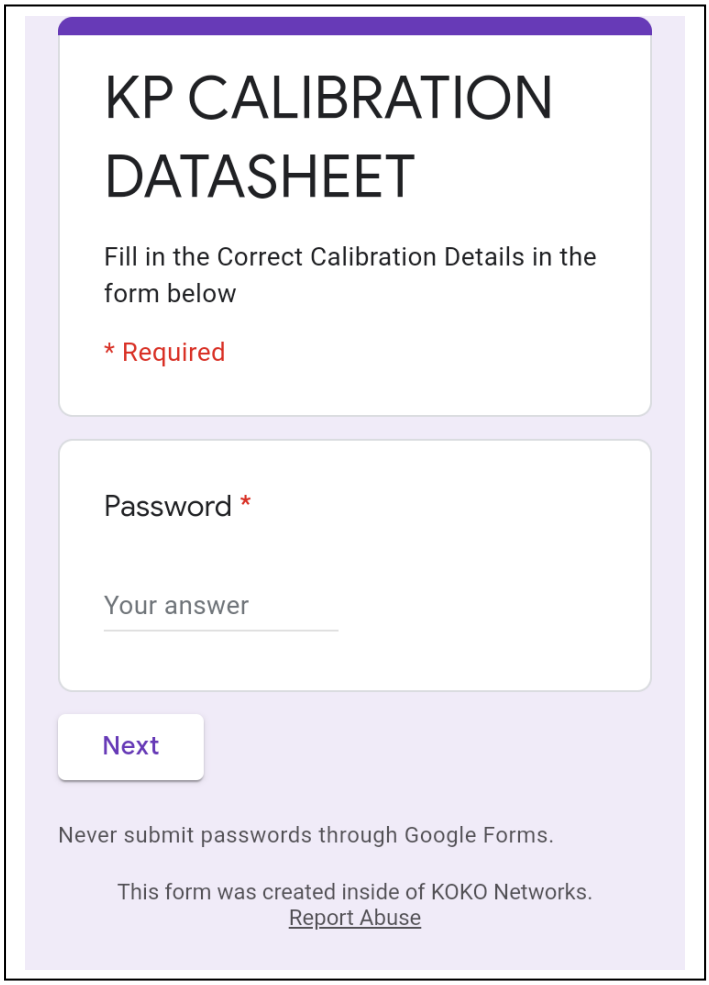
CAUSES OF KP RE-CALIBRATION	
4/20/2020	
0	After Replacing Fuel hose pipe
0	After Replacing Pump
1	After Replacing flow meter
7	After Replacing dock assembley
1	After Replacing dispense tray
14	After Internal Verification
1	After Decomissioned
28	During W&M verification
29	During 3months SG verification
0	After 6 months of initial Calibration

6.6 If you scroll down the home menu

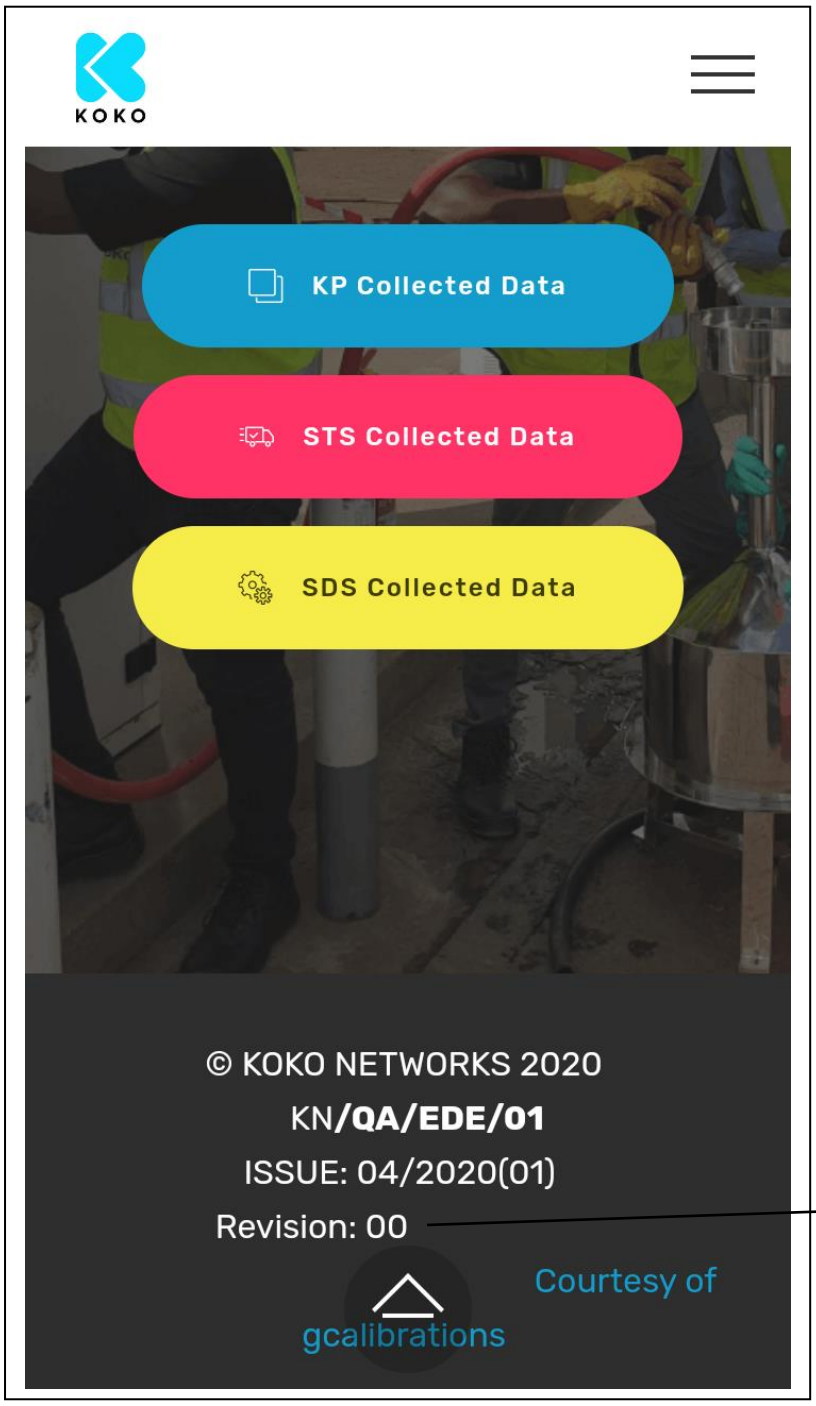


7.0 This application is accordance to ISO 17025 Electronic Data entry/ protection, where the calibration data is controlled and only authorized calibration technician can access the datasheets

As shown when you click KP calibration datasheet icon you see this window where you must log in first



7.1 The Application is subjective to Annual Review and it can be revised as many times as possible for it to comply with the necessary standards



Any time it is Revised this Number will Change