![UGEE logo]	UGEE CHEMICALS PSG Department	**SOP** **Standard Operating Procedure**

CODING STRUCTURE, BASIC OPERATIONS, START UP AND SHUT DOWN

SOP #: UCL/IBDPSG/CD/Q/09.0	Issuance Date:	As at Last Signature	
	Revision Date:	Maximum 2 Years from the effective date	
	Effective Date	20 Days from Issuance Date.	Page 1 of 34

PURPOSE

- To define the standard coding structures to be placed on Finished Product for both primary and secondary packages, the basic operations of the coding machines used in PSG as well as the start-up and shutdown procedures of the equipment.

SCOPE: This SOP covers:

- The coding machines used in Packing Synthetic Granules, PSG operation in P&G, Ibadan Plant:
  - Markem S18i
  - Imaje 9040
  - Imaje 9232
  - Domino Ax150i

-The coding structures applied on both primary and secondary package of all finished products produced in PSG.

-The operations of each coding machines and their running conditions as applicable to the running line standard,

-RLS and QA expectation.

-The Start-up and Shutdown procedures of each coding machines.

RESPONSIBILITY

- **PM Electrical Leader.**

  - Responsible for configuring and uploading the FP image on Markem S18i, Imaje 9040, Imaje 9232 and Domino Ax150i coders to match the right code format for every newly installed or intervened coding unit, at the beginning of the year and **AT 12:00AM FEBRUARY 29 IN A LEAP YEAR.**

  - Responsible for leading the servicing and maintenance of the Markem S18i, Imaje 9040, Imaje 9232 and Domino Ax150i.

  - Responsible for checking the presence, the correctness, and the legibility of the code structure after servicing, maintenance, or configuration is carried out.

  - Responsible for troubleshooting the firmware on the equipment as well as accessing the locked-up functions on the equipment.

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[signature]	*[signature]*	*[signature]*	*[signature]*
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Date: 17/02/2022	Date: 21-02-2022	Date: 21-02-2022	Date: 28/02/2022

-Shift E&I Leader:

- Responsible for installing a new coder unit on the line based on the delegation of the PM electrical Leader.
- Responsible for editing and uploading of images on Markem S18i, Imaje 9040, Imaje 9232 and Domino Ax150i printers at the delegation of the PM Electrical Leader or in his absence.
- Responsible for checking the presence, the correctness, and the legibility of the code structure after servicing, maintenance, or configuration is carried out.
- Responsible for troubleshooting the firmware on the equipment as well as accessing the locked-up functions on the equipment.

- Machine Operator:

- Responsible for checking the presence, correctness, and the legibility of the code on primary packaging during the TAMU checks.
- Responsible for keeping the running line standard of the equipment and their surrounding area.
- Responsible for proper start-up and shutdown of the equipment.

- FPQ Leader:

- Responsible for checking the presence, correctness, and the legibility of the code on secondary packaging during the TAMU checks.

POTENTIAL RISKS

- Ink Splash on eyes
- Skin Irritation

PPE REQUIRED

- Safety goggles.
- Latex hand gloves.

PROCEDURE

BASICS & DEFINITIONS

A batch shall be regarded as production from 12am to 11:59pm of same day.
Example
12:00 am of 23rd July – 11:59pm of 23rd July = 1 batch.

1. The code on both primary and secondary packaging must be in line with the code structures shown below. The coders update automatically therefore, must not be tampered with after initial configuration except during maintenance or coder failure.
2. If code on primary or secondary packaging is not legible, not correct, partially or completely absent, the team/shift leader holds all affected products for 100% sorting and fills a quality alert.

3. Code on primary packaging must be placed on the allotted white space towards bottom right close to seal area on the artwork. If the code is on the printed area, this will make the code illegible, hence put the pallet on hold, fill a quality alert and perform quality inspection on the held pallets to sort the affected bags and reject them.

4. The Julian date is the sequential numbering of the days in the year, considering 365 days in a normal year and 366 days in a leap year. This attachment is pasted at the sides of each UVA and multilane machine for reference.

5. The year of manufacture on both the primary and secondary package is indicated by the last digit of the year between 0-9. For example, '1' indicates 2001, 2011, 2021 and so on.

6. The "Date of Production" code (bbb): the three-digit Julian calendar date (001-365, 366 for Leap Years), e.g.,"031" for January 31, or "219" for August 6 in a Leap Year.

7. The "Location of Manufacturer" code (cccc): a unique set of four characters that denote the production site. The Ibadan plant code is D844.

8. The machine which the finished product is produced from is denoted with "d" and this range from Machine A-Z depending on the number of existing machines.

9. The hour of production is denoted with "ee" and the time format is 24 hours from 00 – 23 hours.

PRIMARY PACKAGE CODE STRUCTURE

The code structure on the finished product (FP) primary pack (polyfilm) is in two forms and each form in two row formats: (1) with SKU grammage written on the primary package by the manufacturer and (2) without SKU grammage written on the primary package by the manufacturer:

(1) *__With SKU grammage written on the primary package by the manufacturer__*
This applies to 400g, 1kg, 2kg etc. See the format below:

BN a bbb cccc d ee
MFD ff gg EXP hh ii

ROW1:	BN	8	065	D844	W	09
		Year of Production a	Julian Date bbb	Ibadan Plant Code cccc	Machine d	Hour of Production ee

ROW2:	MFD	03	18	EXP	03	19
		Month of Production ff	Year of Production gg		Month of Expiry hh	Year of Expiry ii

The letters used in the example of the FP primary package code structure above represent:

BN - Batch Number

a - Year (The last digit of the year of production)

bbb - Julian date

cccc - Ibadan Plant code

d	-	Machine
ee	-	Hour of Production on the primary packaging.
MFD	-	Manufacturing Date
ff	-	Month of production
gg	-	Year of production
EXP	-	Expiry date
hh	-	Month of expiry on the primary packaging
ii	-	Year of expiry on the primary packaging

(2) *Without SKU grammage written on the primary package by the manufacturer*

This applies to 22g, 55g, 75g, 150g, 170g, 800g, 900g etc. Markem S18i will be used to print the specific SKU grammage on the primary package in this situation. See the format below:

Y BN a bbb cccc d ee
MFD ff gg EXP hh ii

		BN	8	065	D844	W	09
ROW1:	**Y**		Year of Production a	Julian Date bbb	Ibadan Plant Code cccc	Machine d	Hour of Production ee
ROW2:		MFD	03	18	EXP	03	19
			Month of Production ff	Year of Production gg		Month of Expiry hh	Year of Expiry ii

The letters used in the example of the FP primary package code structure above represent:

Y	-	SKU grammage.
BN	-	Batch Number
a	-	Year (The last digit of the year of production)
bbb	-	Julian date
cccc	-	Ibadan Plant code
d	-	Machine
ee	-	Hour of Production on the primary packaging.
MFD	-	Manufacturing Date
ff	-	Month of production
gg	-	Year of production
EXP	-	Expiry date
hh	-	Month of expiry on the primary packaging
ii	-	Year of expiry on the primary packaging

Note: in the coding structure for the FP primary packaging as shown above, both the manufacturing and the expiry dates of the FP are expressed in months and years. However, while the month of production and expiration of the FP are the same, the expiry year of the FP is the immediate calendar year after its production.

SECONDARY PACKAGING CODE STRUCTURE

The secondary packaging code structure for polywoven material comes in a single line as shown below:

BN a bbb cccc d MFD ee ff EXP gg hh

BN	8	065	D844	L1	MFD	03	18	EXP	03	19
	Year of Production a	Julian Date bbb	Ibadan Plant Code cccc	Line of Production d		Month of Production ee	Year of Production ff		Month of Expiry gg	Year of Expiry hh

The letters used in the above represents

BN - Batch Number

a   - Year (The last digit of the year of production)

bbb - Julian Date

cccc - Ibadan Plant Code

d   - Line of Production

MFD - Manufacturing Date

ee   - Month of Production

ff   - Year of Production

EXP - Expiry Date

gg   - Month of expiry on the secondary packaging

hh   - Year of expiry on the secondary packaging

REPACK OPERATION

The secondary packaging code structure for polywoven material will have **R,** which denotes repack, in front of Line of Production and date will reflect the day the product was produced. The structure is as shown below:

BN a bbb cccc d R MFD ee ff EXP gg hh

BN	8	065	D844	L1	R	MFD	03	18	EXP	03	19
	Year of Production a	Julian Date bbb	Ibadan Plant Code Cccc	Line of Production D	Repack R		Month of Production ee	Year of Production ff		Month of Expiry gg	Year of Expiry hh

Where R denotes Repack. Other letters same as above.

ACCESS TO CONFIGURATION PARAMETERS

Password is required to access configuration parameters. The parameters must be accessed only by PM Electrical Leader and any qualified E&I personnel.

FONT FORMAT

-Markem S18i:

- Font Type: **Times New Romans**
- Font Size: **(i) 11** for SKU grammage (Y) that ends with **two (2)** decimal characters such as **1.15kg,**

  (ii) 12 for SKU grammage (Y) that ends with **one (1)** decimal character such as **1.8kg,**

  (ii) 14 for other SKU grammages (Y), that is, SKU grammages without decimal such as **2Kg,** and

  (iv) 6 for all other characters

-Imaje 9040:

- Font Type: **sin11118**
- Font Size: **12**

-Imaje 9232:

- Font Type: **Latin**
- Font Size: **9 dots**

-Domino Ax150i:

- Font Type: **OCR font**
- Font Size: **Medium**

BASIC OPERATIONS:

The coding machines used in PSG operation addresses the need for product quality, accountability, and easy traceability. By this, we can have a strict trail of information that follows each bag through the production process from the production floor to the consumers. Hence, it is important to know the basic principle of operations of each of the equipment.

1. PRIMARY PACKAGE CODING MACHINE- MARKEM S-18i

The S-18i printer uses the principle of thermal transfer to imprint on the polyfilm substrate. The printhead is heated and mechanically actuated to impress upon a wax-based ink ribbon. This action causes the thermal printhead to melt the ink on the ribbon and transfer the ink onto the polyfilm substrate as the printhead pressures the ribbon against the substrate which in turn is pressed against a solid rubber pad. Immediately, the print cools off, the image sticks to the white allotted region on the polyfilm.

Loading a new ribbon on the Markem S-18i

1. Stop the printer using stop button on HMI.

2. Switch off power to the printer.

3. Re-connect the new ribbon by taping the end of the used ribbon to the new one.

4. Wind the remaining waste ribbon onto the waste core.

5. Pull some of the unused ribbon from the ribbon supply and wind it onto the waste ribbon take-up.

6. Turn the waste reel by hand at least one revolution and keep the joint between the two as flat as possible.

Note: Failure to follow this procedure may cause ribbon tension problems.

Cleaning and Care of Markem S-18i

1. De-energise the motor by using the Release Ribbon function on the display screen

2. Switch off the supply to the printer from the power unit

3. Remove the Anvil rubber plate on the printer, the printer cover, and the ribbon on the printhead

4. Clean the edge of the thermal printhead gently in a one-way wipe using the white cleaning-pad which is already soaked in isopropanol

Note: Do not use water, WD40 or other solvent to clean the Markem S-18 printhead.

2. SECONDARY PACKAGE CODING MACHINES

A. IMAJE 9040

B. IMAJE 9232

C. DOMINO Ax150i

All the three machines use the same principle of pressurised ink-jet operation, provided with a 3m long printhead and an HMI for set-up.

1. Ink supply Pump: the printer jets stream of ink through a balanced and precise medium to the printhead.

2. Pulse Generator: ink is constantly pressured and broken into micro droplet through the piezo-electric effect.

3. Charge electrode: provides high-flying charges to the ink droplets for character formation on the substrate at the command of a capacitive sensor connected to the printer.

4. Deflection plates and gutter unit: return unused ink-jets to the tank via the gutter unit.

The Printers are designed to be installed on a flat open surface for stability and proper ventilation. The printhead must be well fastened on the stand and positioned perpendicular to the target polywoven. The sensor must also be positioned at angle 90 degrees to the polybag and well secured. The distance between the printhead/sensor unit and the target polybag must not be more than 15cm to achieve a legible print on the FP secondary package.

Refilling of the Imaje 9040 Ink and Additive

To maintain the efficiency of the printer, it is important that the ink and solvent tanks are re-filled anytime and immediately the low-level alarm is prompted.

1. Check the printer's fault alarm on the HMI to know what tank is empty (ink or additive tank or both)

2. Pick the required bottle of liquid to re-fill from the designated flammable items' cabinet.

3. Open the printer's cabinet to access the ink and the solvent tanks.

4. Turn open the required empty tank to be re-filled as well as the ink or additive's bottle.

5. Carefully pour the liquid in the tank avoiding splash to your eyes and the surrounding area. Wear safety goggle.

6. Cover the tank, close the printer's cabinet door, and store the empty bottle in the designated cabinet.

Replacing the Imaje 9232 Ink and Additive

1. Follow the prompting for ink or additive cartridge replacement as indicated on the HMI.

2. Pick the required cartridge to replace from the designated flammable items' cabinet.

3. Open the printer's cabinet and slightly pull the base of the empty cartridge support to unpin the cartridge from the machine.

4. Push the cartridge support upward and remove the support, which houses the cartridge, from the machine.

5. To separate the cartridge from its support, push the cartridge upward and pull it away from its support

6. Now put the new cartridge on the cartridge support and slide it downward to lock it on the support

7. Put the cartridge support, which is now carrying the new cartridge, on its support

8. Then push the cartridge with its support into the machine while ensuring the cartridge head is securely pinned (to the machine)

Replacing the ink and the make-up cartridges of the Domino Ax150i printer

1. Follow the prompting for ink or make-up cartridge replacement as indicated on the HMI.

2. Pick the required cartridge to replace from the designated flammable items' cabinet.

3. Open the printer's cabinet and screw out the empty cartridge indicated by a red light

4. Then, hold the new cartridge near the quality management module (QMM) inside the cabinet to read the code on the cartridge. This is to verify if the cartridge is fit for use before opening it.

5. Check the cartridge using the table below:

Light indication on QMM	Meaning	Action
Yellow	Not Found	Try another cartridge
Flashing Yellow	Reading	Wait
GREEN	Good	Use this cartridge
RED	Not Good	Try another cartridge

6. If cartridge is good and fit for use, break and remove the seal on it using Allen key 6.

7. Turn it over and fit it into position by turning the bottle clockwise.

8. Then, check for any leakages on the cartridge before closing the printer's door. If any leakage, it means, the cartridge is not well locked or not well balanced into position. Remove it and again, fit it into a well-balanced position.

Cleaning and care of Imaje 9040 and 9232 printhead

To clean the printhead of the Imaje 9040 and 9232, follow these steps:

1. Stop the jet; Navigate to the Menu and press the jet stop function

2. Position the head onto its maintenance holster

3. Remove the printhead cover and close the gutter screw located in the printhead with a flat screwdriver

3. With safety goggle and latex gloves applied, carefully flush the printhead with cleaning solution and apply a soft brush to remove all accumulated ink and dirt, avoiding splash.

4. Dry the printhead using the blower bulb or the drying kit to thoroughly dry the cleaning solution from all areas of the printhead

5. Open the gutter while the printer hangs on its holster and start up the jet. Ensure inkjet enters the gutter before covering the printhead. Then, navigate the press buttons to clear any fault indicated on the HMI.

6. Place the printhead back on its production support and clear off all cleaning tools, maintaining good running line standard.

7. Check for the correctness and the legibility of the code after cleaning.

Cleaning and care of the Domino Ax150i

To clean the Domino Ax150i printhead, follow these steps:

1. Switch off the printer (Press hold the power button for 2 seconds and wait for the printer to shut down)

2. Disconnect printer from power and position the printhead onto a wash station

3. Remove the printhead cover (Press the retaining clips on the printhead to remove the cover)

4. Also, remove the internal cover by pulling the cover gently downward to lift it away from the printhead

5. Loosen the screw on the charge electrode with T6 Torx screwdriver to unlock

6. Clean the deflection plates on the printhead with the Domino wash solution using a soft or feather brush

7. Also, clean any ink residue on the deflector plates and the gutter area.

8. Then, place the charge electrode and screw back into position

9. Place both the internal and the outer covers of the printer in position and return the printhead to its stand

10. Power up the printer and check for the correctness and the legibility of the code.

THE START-UP AND THE SHUT-DOWN PROCESS:

A. Markem S-18i printer:

The S-18i printer has a power unit fed with a 240VAC supply. The power unit is located close to the printer and can be turned ON or OFF for both start-up and shutdown respectively.

1. Switch ON the power unit of the Markem S-18i and wait for approximately 20 seconds for the printer's monochrome LCD homepage to display.

2. Select the START print command on the display pad to immediately start the printing operation.

Note: the printer auto-calibrates itself when powered to set the right tension for the ribbon take-up and to check the diameter of the ribbon on the roller assembly as well as the datum position of the printhead.

To shut down the Markem S-18 printer, select the *stop* button on the display screen to stop then, shut down the power unit by switching the power button to the OFF position.

B. The Imaje 9040 and 9232:

Prior, to powering up the Imaje 9040 and 9232, the printhead must be clean to remove past ink accumulation using the cleaning solution while the gutter screw is turned in a horizontal direction to close. This is to ascertain that no dirt is trapped in the gutter while cleaning the printhead. After this, dry up the printhead with light air supply using the blower kit and then, turn the gutter open in a vertical direction while the printhead still hangs in its holster.

Once the printer is connected to power source, an indicator light comes ON. Then,

1. Start up the printer using the power ON button on the printer's HMI
2. Wait for approximately 2mins for the homepage to appear on the printer to access the *production menu*
3. When the Printer is ready, a green signal light begins to blink on the HMI, indicating that the printhead is ready. Enter the production menu with the *enter* button
4. Navigate to the *Status/Printhead* menu and press enter, leading to the *Jet status* menu page
5. Drop down on the *Status Jet* function and click on *Jet Start-up*
6. The ink-jet automatically breaks off to enter the gutter on the printhead unit. Once, this is achieved, apply the printhead cover and position the printhead in its housing, ready to print on the substrate.
7. Check for the correctness and the legibility of the code after cleaning.

To shut down the Imaje 9040 and 9232, follow the following steps:

1. Press the ON/OFF button to shut down the printer (a dialogue box appears requesting what type of shut down you want)
2. Select the type of shutdown you want using the arrow button, then press enter to confirm
   Note: Select a "Long shutdown" if the printer is to be stopped for over 4 hours to a day or more and select s "short shutdown" if the printer will be started immediately after 4 hours or less.
3. In each case, hang the printhead in its holster and close the gutter with a flat screw driver by turning it in the horizontal position.
4. Remove the cover and wash the printhead with cleaning solution, after which the cover is placed again for protection of the printhead.
5. Switch off power supply to the Imaje 9040 and 9232 from the socket.

C. Domino Ax150i:

The Domino Ax150i is also provided with a 240VAC supply from the UPS on the PSG floor. Before powering up the printer, clean the printhead to remove past ink accumulation using the wash solution. This is to ascertain that the printhead is dirt-free.

Once the printer is connected to a power source, a red status light comes on. Then,

1. Press and hold the "start and stop" button to start the printer for 2 seconds.
2. The printer will now sequence in the following order:
   a. The green light indicator lights ON the power button and the "start and stop" button begins flashing to indicate the printer is starting up.
   b. The touch panel screen will display the quickstep start-up progress log

c. The red indicator light in the power button will turn off

d. The status tab will display the printer status and any faults that require attention.

e. The printer is now ready to print.

Note: when the printer is in the Ready state, the ink jet will be running, and it can now print immediately it receives the correct print signal from the sensor. The printer only prints in the "ready state". In the "idle state" of the Domino printer, the printing action is paused, hence, the printer will not print. Therefore, press the "start and stop" button to release the printer from the "idle state" to its "ready state".

To shut down the printer, follow the steps below:

1. Press and hold the power button for 2 seconds

2. The printer begins a sequence of shutdown procedure

    a. A progress bar is displayed on the touch panel screen.

    b. The green indicator light on the power button begins to flash.

    c. The printhead will run auto-flush cycle to prevent ink from drying and blocking the ink-jet nozzle and the gutter.

    d. The printer will shut down.

    e. The red status light on the power button indicates the printer is still connected to power source.

    f. Disconnect the printer from power source and clean the printhead

REASON FOR UPDATE: New SOP

End Of Procedure

SOP Related Attachments
Attachment 1. Qualification Test   Attachment 2. Model Answers   Attachment 3. Job aid on how to select correct markem code for each SKU   Attachment 4. Job aid on how to copy and upload markem code for each SKU   Attachment 5. Job aid on how to configure markem code   Attachment 6. Markem S18i step up card   Attachment 7. Imaje 9040 maintenance step up card   Attachment 8. Imaje 9040 CIL step up card

![UGEE logo] **UGEE CHEMICALS** IBADAN PLANT		PSG Department

CODING STRUCTURE, BASIC OPERATIONS, START UP AND SHUT DOWN
Training & Qualification Sheet

Trainee Name:		Trainer Name:	
Training Date:		Qualifier Name:	

Question # 1: What is the responsibility of the machine operator on the coding structure SOP?

Answer # 1:

Question # 2: The code of a product is essential for traceability

Answer # 2 :   [True] [False]

Question # 3: The first digit in the batch number represents?

Answer # 3:

Question # 4:(a) Is BN 9308D844L4 MFD1119 EXP1120 a correct secondary packaging code structure?

(b) If BN 9308D844L4 R MFD1119 EXP1120 is a secondary code structure, what does R represent and is the code structure correct?

Answer # 4: (a) [True] [False]

(b) R represent ……………………….. and the code structure is [Correct]   [Not correct]

Question # 5: What is the term Julian Date?

Answer # 5 :

Question # 6: What should be done to the primary package with the codes on the printed areas?

Answer # 6:

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Question # 7: Where should the Code on the bag be placed on the artwork?

Answer # 7:

Question # 8: What are the font type and sizes for markem S18i coding unit?

Answer # 8:

Question # 9: Who is responsible for configuring and uploading of image on the Markem S18i, Markem-Imaje 9040 & 9232 and Domino Ax150i coders to match the right code format for every newly installed or intervened coding unit, at the beginning of the year and at 12:00am February 29 in a leap year?

Answer # 9:

Question # 10: (a) The "Location of Manufacturer" code (cccc) for Ibadan plant is ....   (b) BN2041D844A 15   is not a correct primary code   MFD0222EXP0223

Answer #10: (a) ....   (b) [True]   [False]
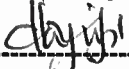
The person is considered passed if he scores 100 % in the above test.

Training Results: _____ (tick as appropriate) Succeeded: [   ]

Qualifier 's Sign/Date: _____

Fill if re-qualification is needed:

Date of re-qualification: _____

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Atobajaiye 'segun	Alawode Olujide	Adebiyi Adedoyin	Ogunrinde Adebayo
Date: 17/02/2022	Date: 21-02-2022	Date: 21-02-2022	Date: 28-02-2022

UGEE CHEMICALS IBADAN PLANT	Job Aid How to Select Markem S18i Code During Changeover to Match SKU	Job Aid Number: PSG/2022/001 Date: 15/02/2022

Purpose: To explain how to select right markem S18i code during changeover from one SKU to another to avoid miscode.

When: Do this at every changeover from one SKU to another on each machine undergoing changeover if code is already saved to markem coder unit memory.

Materials: This job requires navigating through markem S18i HMI

Actions	Steps
	1) Press STOP on markem HMI

2) Press Menu

3) stroll to image

4) Press Select

5) Using up or down keypad Stroll to the code with name matching the company and SKU you are changing to (SKU is 1.7Kg and company is P&G in the picture)

UP KEYPAD

DOWN KEYPAD

6) Press select to load the code

7) Reconfirm on the home page that you have selected the right code for the SKU you are changing to.
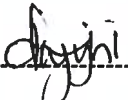
ATTACHMENT 3

SOP No. UCL/IBDPSG/CD/Q/09.0
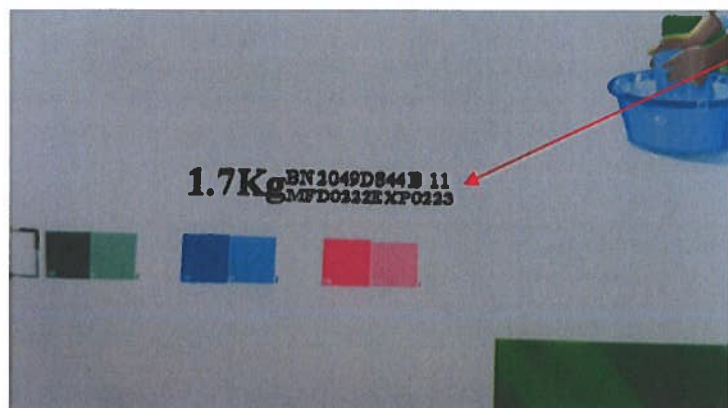
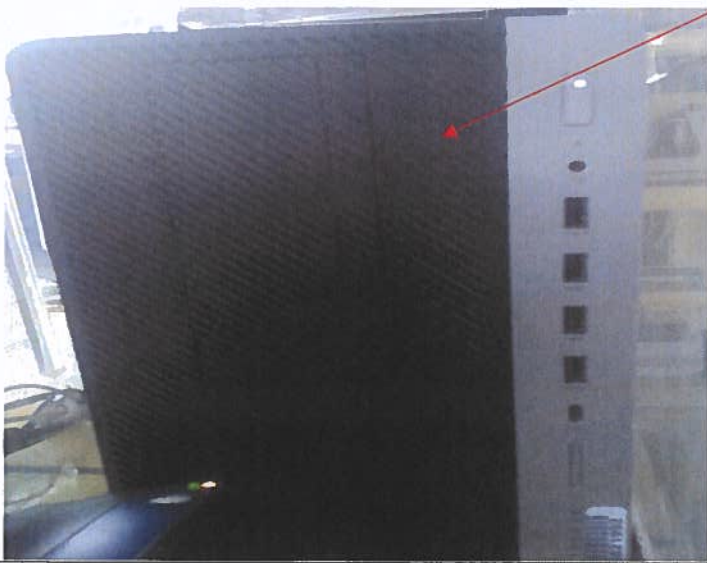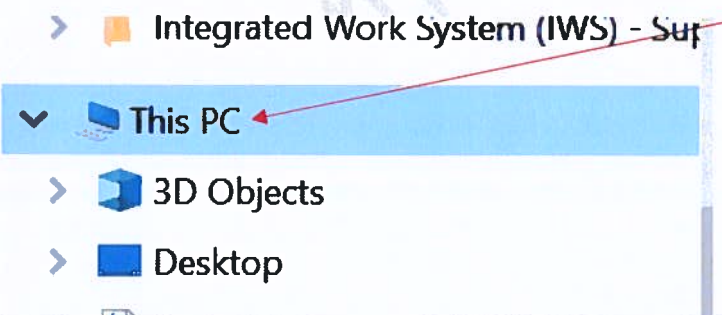|	
	8) Test print to confirm legibility and correctness of the image
	9) Press start on the markem HMI to enter production mode

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| UGEE CHEMICALS
IBADAN PLANT
 | **Job Aid**

How to upload image to Markem Coder | **Job Aid Number: PSG/2022/002**
Date: 15/02/2022 |

Purpose: To explain how to upload image to markem coder

When: Do this when new markem is installed or at the beginning of the year

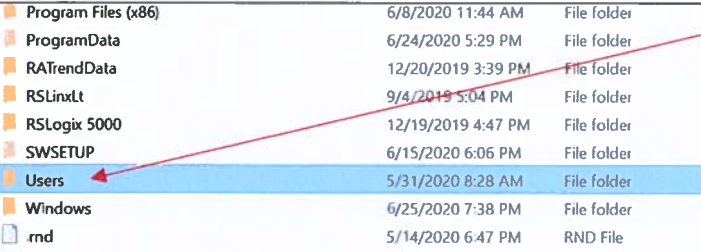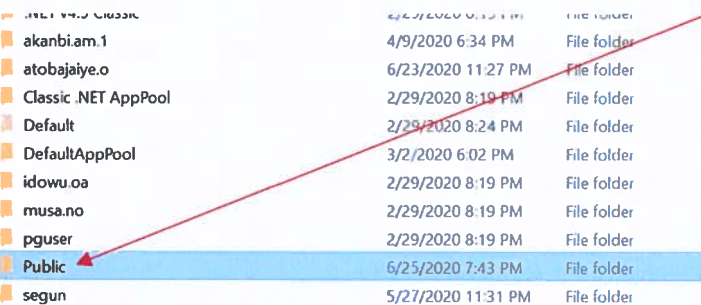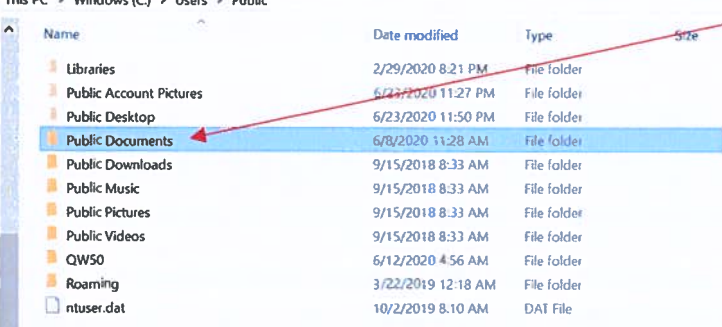**Materials**: This job requires the use of a personal computer with existing image and flash drive

Pictures	Steps
	1) Login to the computer that contains the image(s) to be uploaded. Note: If image is already saved on the flash drive you want to use, please jump to step 10. Only markem image must be in the flash drive! No other file is allowed! This is to avoid corrupting markem board. Do not insert the flash drive into markem coder if it has another file apart from markem image.
	2) Double click "This PC" on your computer

Windows (C:) 26.1 GB free of 237 GB	3) Double click "C" drive

Program Files (x86) — 6/8/2020 11:44 AM — File folder ProgramData — 6/24/2020 5:29 PM — File folder RATrendData — 12/20/2019 3:39 PM — File folder RSLinxLt — 9/4/2019 5:04 PM — File folder RSLogix 5000 — 12/19/2019 4:47 PM — File folder SWSETUP — 6/15/2020 6:06 PM — File folder Users — 5/31/2020 8:28 AM — File folder Windows — 6/25/2020 7:38 PM — File folder .rnd — 5/14/2020 6:47 PM — RND File	4) Double click the folder called "Users" located towards the bottom left

.NET V4.5 Classic — 2/29/2020 8:19 PM — File folder akanbi.am.1 — 4/9/2020 6:34 PM — File folder atobajaiye.o — 6/23/2020 11:27 PM — File folder Classic .NET AppPool — 2/29/2020 8:19 PM — File folder Default — 2/29/2020 8:24 PM — File folder DefaultAppPool — 3/2/2020 6:02 PM — File folder idowu.oa — 2/29/2020 8:19 PM — File folder musa.no — 2/29/2020 8:19 PM — File folder pguser — 2/29/2020 8:19 PM — File folder Public — 6/25/2020 7:43 PM — File folder segun — 5/27/2020 11:31 PM — File folder	5) Double click the folder called "Public"

This PC > Windows (C:) > Users > Public Name — Date modified — Type — Size Libraries — 2/29/2020 8:21 PM — File folder Public Account Pictures — 6/23/2020 11:27 PM — File folder Public Desktop — 6/23/2020 11:50 PM — File folder Public Documents — 6/8/2020 11:28 AM — File folder Public Downloads — 9/15/2018 8:33 AM — File folder Public Music — 9/15/2018 8:33 AM — File folder Public Pictures — 9/15/2018 8:33 AM — File folder Public Videos — 9/15/2018 8:33 AM — File folder QW50 — 6/12/2020 4:56 PM — File folder Roaming — 3/22/2019 12:18 AM — File folder ntuser.dat — 10/2/2019 8:10 AM — DAT File	6) Double click the folder called "Public Documents"

Clipboard — Organize — New > This PC > Local Disk (C:) > Users > Public > Public Documents QUIPMENT Name duct Weight old22062020 product weight old2262 L1,L2&L4 Markem Code for 2022 L1,L2&L4 P&G markem code for 2022 Rockwell Rockwell Automation	7) Double click the folder called " L1,L2&L4 P&G markem Code" to open the needed image(s) for P&G related code Note: Folder containing markem code for other company will bear that company's name.

Name L1 Markem Code for 2022 L2 Markem Code for 2022 L4 Markem Code for 2022	8i)Double click the folder of the line where the needed machine image is located
Name — **Date modified** UVA_A — 2/17/2022 12:01 PN UVA_B — 2/17/2022 12:03 PN UVA_C — 2/17/2022 8:25 PM UVA_D — 2/17/2022 8:27 PM	8ii) Double click the folder of the needed machine code
  8_A_400g_P&G.bff — 2/17/2022 12:00 PM — BFF File — 9 KB 8_A_400g_P&G.image — 2/17/2022 12:00 PM — IMAGE File — 5 KB 9_A_800g_P&G.bff — 2/17/2022 11:51 AM — BFF File — 9 KB 9_A_800g_P&G.image — 2/17/2022 11:51 AM — IMAGE File — 5 KB 10_A_900g_P&G.bff — 2/17/2022 9:12 AM — BFF File — 9 KB 10_A_900g_P&G.image — 2/17/2022 9:12 AM — IMAGE File — 5 KB 11_A_1Kg_P&G.bff — 2/17/2022 9:09 AM — BFF File — 9 KB 11_A_1Kg_P&G.image — 2/17/2022 9:09 AM — IMAGE File — 5 KB	9) Copy the image (both BFF and IMAGE file) to a flash drive (ensure only markem image is in the flash drive to avoid corrupting markem board). Note: a single image comes in a pair of files, that is, BFF and IMAGE files.
	10) Insert the flash drive into markem flash drive port

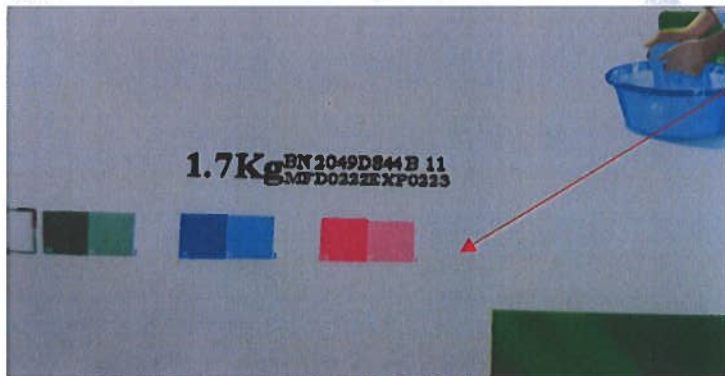|	
	11) Enter password
	12) click add images to add only one SKU image. Click add all images to add more than one SKU images.
	13) Select the image

	14) Press Back
	15) Remove flash drive (Memory Stick)
	16) Test print to confirm legibility and correctness of the image

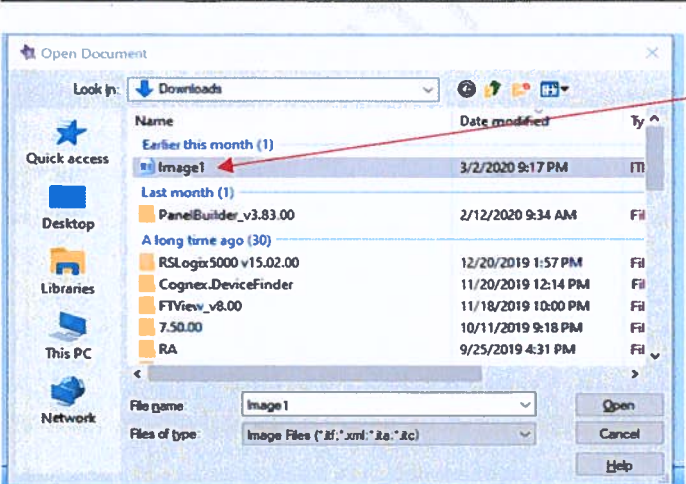| SOP OWNER	QA APPROVAL	HS&E APPROVAL	AUTHORISATION
Atobajaiye 'Segun	Alawode Olujide	Adebiyi Adedoyin	Ogunrinde Adebayo
Date: 17/02/2022	Date: 21-02-2022	Date: 21-02-2022	Date: 28-02-2022
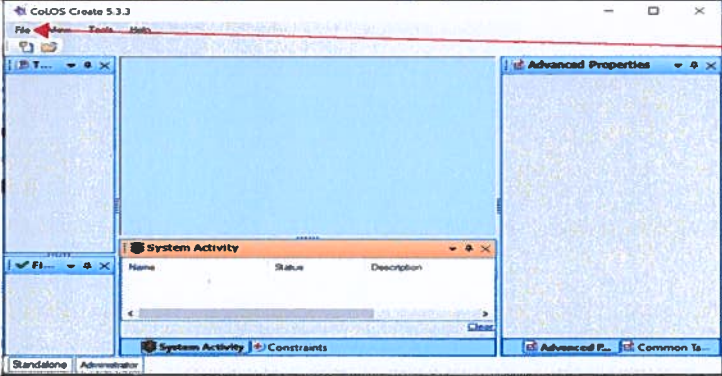
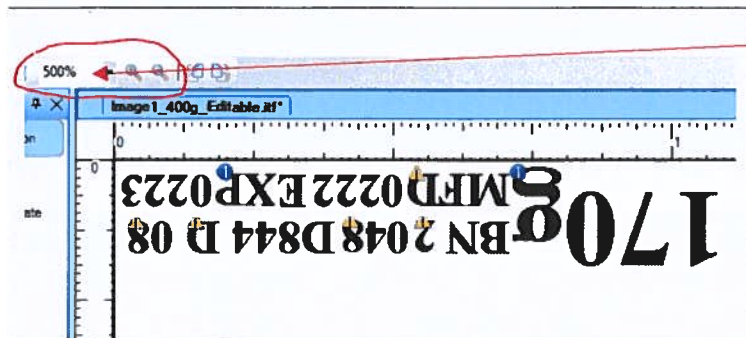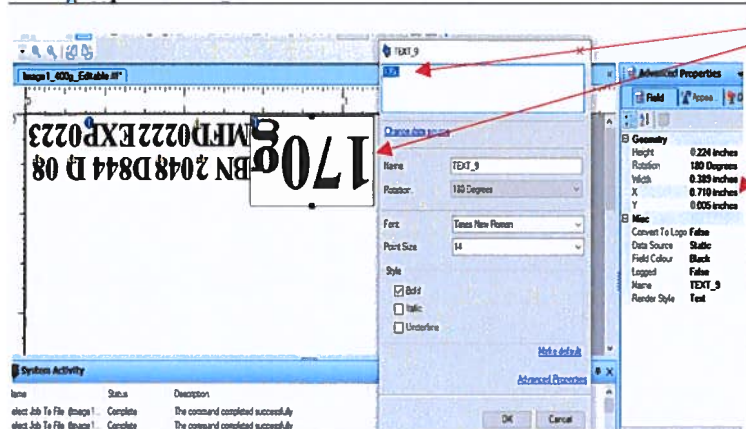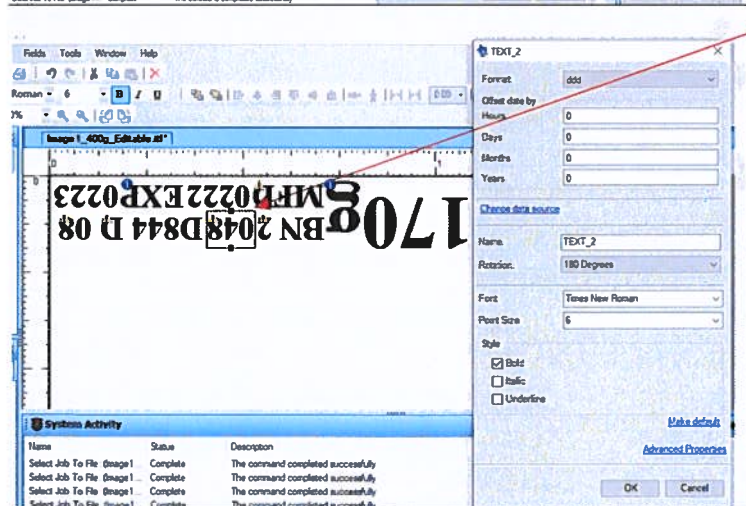| **Ugee Chemicals** **Ibadan Plant** U	**Job Aid** **How to Configure Markem S18i** **Image and upload to Markem** **Coder**	**Job Aid Number: PSG/2022/003** **Date: 15/02/2022**

Purpose: To explain how to configure markem S18i image and upload it to markem coder

When: Do this at the beginning of the year, 12:00am February 29 in a leap year, when a new board is installed and when a new markem coder is installed

Materials: This job requires the use of a personal computer with existing image, CoLOS Create software and flash drive

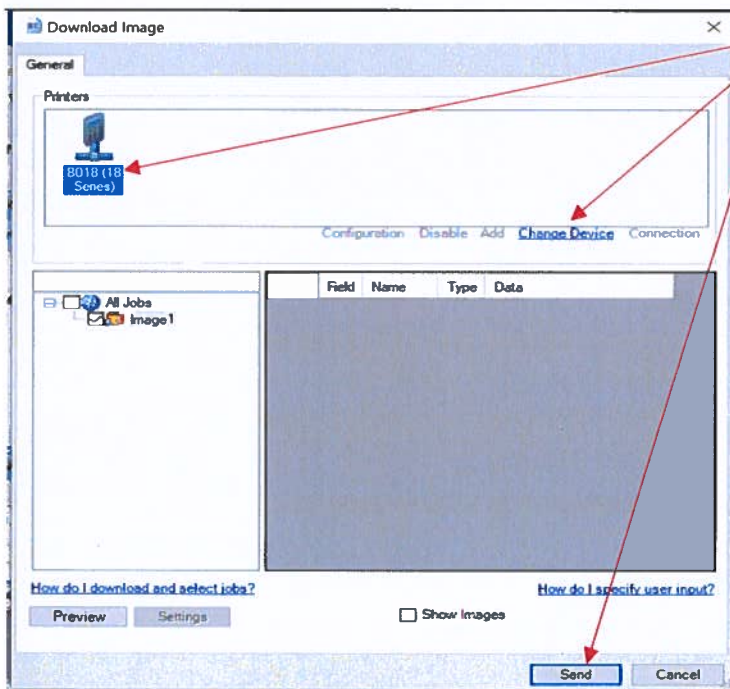| Actions	Steps
	1) Open CoLOS Create software
	2) Click on File >>open or press CTRL+O (to open an existing image on the system)
	3) Find and select the image and then click open (or double click the image when you find it)

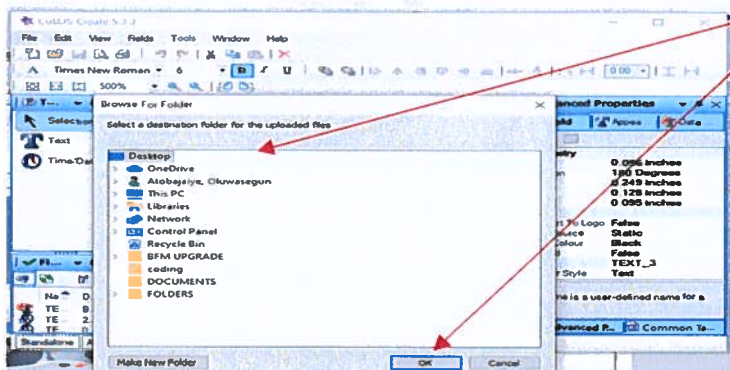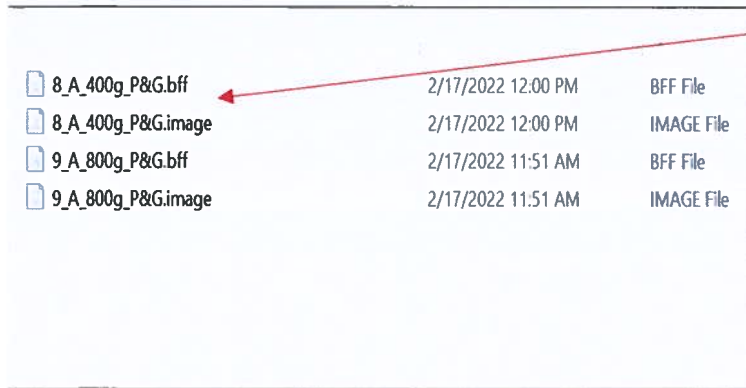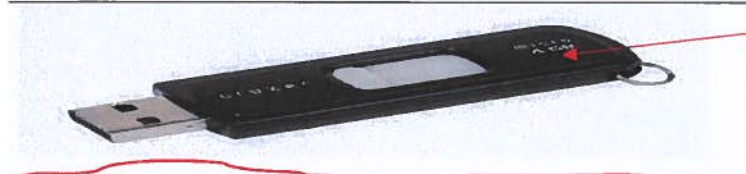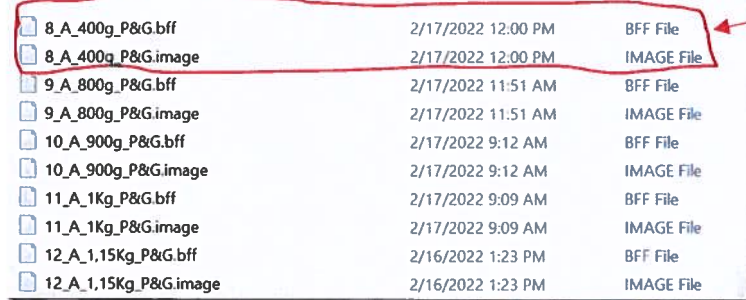|	
	4) Zoom the opened image as appropriate
	5) Double click the part of the image to be configured, edit as appropriate and click ok. (Note: Each of the image part must have rotation of 180 degree)
	6) Double click the Julian date and verify from the dialogue box that "offset date by" is set to: **(i) for normal year: Hours =0, Days=0, Months=0 and Years=0** **(ii) for leap year: Hours=0, Days=1, Months=0 and Years=0 (this only applies from February 29 in a leap year. Follow "I" above for January 1st to February 28th).**

7) Click file >> print to file
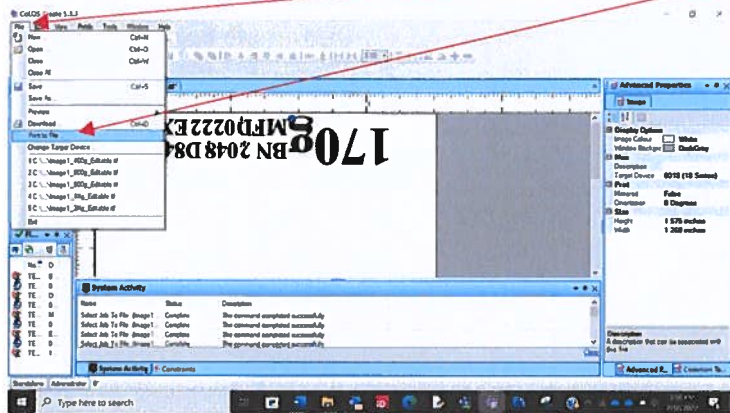
8) Select 8018 (18 series) or click change device to select 8018 (18 series) and click send

9) Select destination folder (where to save the image) and click OK

8_A_400g_P&G.bff	2/17/2022 12:00 PM	BFF File	
8_A_400g_P&G.image	2/17/2022 12:00 PM	IMAGE File	
9_A_800g_P&G.bff	2/17/2022 11:51 AM	BFF File	
9_A_800g_P&G.image	2/17/2022 11:51 AM	IMAGE File	

10) Rename the image to conform to below examples:

8_A_400g_P&G.bff
8_A_400g_P&G.image

Where: 8 is image number on markem register (You cannot use this number for another SKU)
A is machine A
400g is the SKU
P&G is the company that uses the code format
.bff and .image are file extensions

8_A_400g_P&G.bff	2/17/2022 12:00 PM	BFF File
8_A_400g_P&G.image	2/17/2022 12:00 PM	IMAGE File
9_A_800g_P&G.bff	2/17/2022 11:51 AM	BFF File
9_A_800g_P&G.image	2/17/2022 11:51 AM	IMAGE File
10_A_900g_P&G.bff	2/17/2022 9:12 AM	BFF File
10_A_900g_P&G.image	2/17/2022 9:12 AM	IMAGE File
11_A_1Kg_P&G.bff	2/17/2022 9:09 AM	BFF File
11_A_1Kg_P&G.image	2/17/2022 9:09 AM	IMAGE File
12_A_1,15Kg_P&G.bff	2/16/2022 1:23 PM	BFF File
12_A_1,15Kg_P&G.image	2/16/2022 1:23 PM	IMAGE File

11) Copy the image (both BFF and IMAGE file) to a flash drive (ensure only the needed images are in the flash drive to avoid any form of mistake).

Note: a single image comes in a pair of file that is BFF and IMAGE file.

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12) Insert the flash drive into markem flash drive port

13) Enter password

14) Click add images to add only one SKU image. Click add all images to add more than one SKU images.

15) Select the image and wait for it to load if "Add Images" was selected in step 14 above. The images will be automatically added to markem memory if "Add All Images" was selected in step 14 above.

16) Click "Back"

17) Remove flash drive (Memory Stick)

18) Test print to confirm legibility and correctness of the image

SOP OWNER	QA APPROVAL	HS&E APPROVAL	AUTHORISATION
Atobajaiye 'Segun	Alawode Olujide	Adebiyi Adedoyin	Ogunrinde Adebayo
Date: 17/02/2022	Date: 21-02-2022	Date: 21-02-2022	Date: 28/02/2022

Trainee: _____

Role: _____

Qualifier: _____

Skill Owner: _____

S/N	Skill	Tasks/ Knowledge check	Target Profic.	Self Evaluation Date	Self Evaluation	First Evaluation Date	First Evaluation	Final Evaluation Date	Final Evaluation
1	START-UP, SHUTDOWN AND BASIC OPERATIONS	Can power up markem S18	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can shut down markem s18	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can adjust print head/back plate distance to achieve legible coding	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can navigate markem S18I HMI	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can set date and time on markem s18i	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can explain critical parameters on the S18i HMI unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can clean rollers and print head unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Knows component parts of markem s18i unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can interprete markem s18i code on finished products	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace ribbon on markem s18i	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can troubleshoot problems on markem s18i following user manual and its HMI guide	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can confirm if the camera is online or offline	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
2	IMAGE EDITING AND UPLOADING	Can launch a CoLOS Create software on a personal computer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can create images using the CoLOS Create software	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can print the created image to file (save image)	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can rename the saved image to acceptable markem s18i format	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can select images to be saved from the memory stick to	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can adjust the distance between the printer and work plate to achieve a good print quality	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can configure camera input and output settings	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can locate and copy saved image from computer to memory stick (flash drive)	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Knows how to insert a memory stick (flash drive) to the printer unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can save images from the memory stick to the printer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can save images from the printer to memory stick	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can copy images from a printer unit and upload on another unit or personal computer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can uninstall markem unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
3	MARKEM S18i MAINTENANCE (CIL AND IT&M)	Can clean the thermal print head with markem wipe	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect the rollers with the markem wipe	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can clean the rollers with the markem wipe	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect printhead for defect and replace when defective	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect printhead PCB and flex cable for defect and replace when defective	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect printhead carriage mechanism for wear and tear, and replace defective components	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect to know if the hubs are wobbled or bad	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect the rollers and identify defects when present	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can open markem unit to clean and inspect its inner part	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace and maintain markem main board	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace and maintain markem stepper motors and solenoid	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace and maintain markem sensors	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect for burnt parts on the markem unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can install markem unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5

Signature of Trainee _____
Date of Qualification _____

Signature of Qualifier _____
Date of Qualification _____

SOP OWNER	QA APPROVAL	HS&E APPROVAL	AUTHORISATION
Atobajaiye 'Segun	Alawode Olujide	Adebiyi Adedoyin	Oguntunje Adepayo
Date: 17/02/2022	Date: 21-03-2022	Date: 21-02-2022	Date: 25/02/2022

EMPLOYEE STEP UP CARD FOR FHC PSG CODING MACHINES- Imaje 9040 Operations, Troubleshooting & Maintenance

Trainee:

Role:

Qualifier:

Skill Owner:

S/N	Skill	Tasks/ Knowledge Check	Target Profic.	Self Evaluation Date	Evaluation	First Evaluation Date	Evaluation	Final Evaluation Date	Evaluation
1	Overview	Can explain how the printer unit works	2		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can mention different units in the printer and their functions	2		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can mention different components on each unit and explain their functions	2		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
2	Operations	Can start up and shutdown the printer unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can start up and shutdown the print head unit of the printer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can set up a new printer unit and make it ready for use on the production line	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can navigate through the screen/ menu of the printer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can adjust Q-parameters on the printer unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can adjust the jet to enter the gutter properly	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can adjust the date and time on the printer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can adjust the jet of the print head to achieve a good print quality	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
3	Message editing & uploading	Can select a new image on the printer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can select edit and save a new image on the printer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can copy an image from a printer and upload on another printer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
4	Troubleshooting	Can explain and fix phase drop detection fault on the printer unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can explain and fix gutter recuperation faults on the printer unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can explain and fix pressure faults on the printer unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can list the possible causes of a bad jet and fix it	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace a filter	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can ridentify a bad gutter and replace with a new one	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
5	Maintenance	Can replace a missing "O" ring	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace a damaged potentiometer	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can clean a print head	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace a print head	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace a resonator	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can replace a bad sensor	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5

Signature of Trainee _____

Date of Qualification _____

Signature of Qualifier _____

Date of Qualification _____

SOP OWNER	QA APPROVAL	HS&E APPROVAL	AUTHORISATION
Atobajaiye Segun	Alawode Olujide	Adebiyi Adedoyin	Ogunride Adebayo
Date: 1/03/2022	Date: 21-02-2022	Date: 2-02-2022	Date: 28/01/2022

Trainee: _____

Role: _____

Skill Owner _____

Qualifier: _____

S/N	Skill	Tasks/ Knowledge Check	Target Profic.	Self Evaluation Date	Self Evaluation	First Evaluation Date	First Evaluation	Final Evaluation Date	Final Evaluation
1	FHC PSG CODING MACHINES- Imaje 9040 CIL	Can explain how the printer unit works.	2		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can mention different units in the printer and their functions	2		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can mention different components on each unit and explain their functions	2		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can clean the printhead unit	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can clean valves	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can drain and flush the ink in the printer completely for long term shutdowns	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect the print head unit for any physical damage	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect the print head unit for a good sunction	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5
		Can inspect to know if the sensors in the tanks are functioning properly	3		1 2 3 4 5		1 2 3 4 5		1 2 3 4 5

Signature of Trainee _____

Date of Qualification _____

Signature of Qualifier _____

Date of Qualification _____

SOP OWNER	QA APPROVAL	HS&E APPROVAL	AUTHORISATION
Atobajaiye 'Segun	Alawode Olujide	Adebiyi Adedoyin	Ogunniade Adebayo
Date: 17/02/2022	Date: 21-02-2022	Date: 21-02-2022	Date: 28/02/2022