Ugee Chemicals Ltd
Fabric & Home Care
MSG

BP Weigh Hopper Load Cell Static Calibration Report.

Calibration Date : ...../...../.....

Shift :

Calibration Operator:.....

				Note : Deviation Percentage Must not Exceed + or - 1%
Calibration Reason	*Failure*	*Planned*	*Complaint*	*Other Reasons*
Description				

Before Repair Data:

Visual Check	*Parts*
OK	
NOT OK	

Pre verification Checklist :

Follow the next procedure during the Admix Hopper scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Ok	Not ok	Notes
1	Check that the Admix Hopper is free moving and the load cell suspenders are in a good condition			
2	Check that the Admix Hopper infeed pipes don't have sticky buildups forming rigid connection to the hopper			
3	Check that all flexible connectors on the hopper are in good shape			
4	Check that there is no foreign object on the Admix Hopper			
5	With the discharge valve closed. Read-off Weight measurement from IND 780 display (L1). Add dead weights of known mass (X kg). X=100 kg			

Static Calibration Steps :

#	*Step*		*Value*	*Notes*
1	*Weigh Hopper initial weight*	W_o		
2	*Weigh Hopper final weight after adding X KG*	W_f		
3	*Expected Hopper Weight*	$W_e = Wo + X$		
4	*Deviation Percentage*	$DV = (We - Wf)/Wf * 100$		

Note : If the deviation percentage exceeds + or - 1% Perform dynamic calibration and adjustment.
X = 100Kg

Comments:

Name/Sign/Date .....
Calibration Operator.

Name/Sign/Date .....
4TH EYE CHECK.

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08-June-2023	Date: 08/June/23	Date: 09 - June 2023

Ugee Chemicals Ltd
Fabric & Home Care
MSG

Crutcher's Load Cell Static Calibration Report.

Calibration Date : ……../……../……..

Shift :

Calibration Operator: ……

				Note : Deviation Percentage Must not Exceed + or - 1%
Calibration Reason	*Failure*	*Planned*	*Complaint*	*Other Reasons*
Description				

Before Repair Data:

Visual Check	*Parts*
OK	
NOT OK	

Pre verification Checklist :

Follow the next procedure during the Crutcher scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Yes	No	Notes
1	Check that the Crutcher is freely mobile and the load cell suspenders are in a good condition			
2	Check that the crutcher infeed chutes don't have bulk solids buildups forming rigid connection to the vessle			
3	Check that Minor liquid and Rvbase infeed line for sticky buildup that may be forming rigid connection with vessle			
4	Check that all flexible connectors on the vessle are in good shape			
5	Check that there is no foreign object on the crutcher			
6	Interupt a Crutcher batch while content is greater than 1500 Kg and discharge valve closed. Read-off Weight measurement from the IND780 display (Wo). Add dead weights of known mass (X kg). X=300			
7	Read-off Weight measurement which essentially sums Crutcher content and dead weights (W_f)			

Static Calibration Steps :

#	*Step*		*Value*	*Notes*
1	*Crutcher Vessel initial weight (should be >1500Kg)*	W_o		
2	*Crutcher vessel final weight after adding X KG*	W_f		
3	*Expected Vessel Weight*	$W_e = Wo + X$		
4	*Deviation Percentage*	$DV = (We - Wf)/Wf * 100$		

Note : If the deviation percentage exceeds + or - 1% Perform dynamic calibration and adjustment.

X = 300Kg

After calibrations empty the crutcher and add dead weight of 100kg, to acertain the sensitivity of load cell on minimal weights

Comments:

Name/Sign/Date ……

Calibration Operator.

Name/Sign/Date ……

4TH EYE CHECK.

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08-June 2023	Date: 08/June/23	Date: 08-June 2023

Ugee Chemicals Ltd
Fabric & Home Care
MSG

Ageing Vessle Load Cell Static Calibration Report.

Calibration Date : ……/……/……

Shift :

Calibration Operator:……

				Note : Deviation Percentage Must not Exceed + or - 1%
Calibration Reason	*Failure*	*Planned*	*Complaint*	*Other Reasons*
Description				

Before Repair Data:

Visual Check	*Parts*
OK	
NOT OK	

Pre verification Checklist :

Follow the next procedure during the Ageing vessle scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Ok	Not ok	Notes
1	Check that the Ageing vessle is freely suspended and the load cell suspenders are in a good condition			
2	Check that the Ageing vessle infeed pipe don't have sticky buildups forming rigid connection to the vessle			
3	Check that all flexible connectors on the vessle are in good shape			
4	Check that there is no foreign object on the crutcher			
5	Interupt a Spraydrying process while content is greater than 1500 Kg and discharge valve closed. Read-off Weight measurement from the IND780 display (Wo). Add dead weights of known mass (X kg). X=600 kg			
6	Read-off Weight measurement which essentially sums Ageing vessle content and weights (W_f)			

Static Calibration Steps :

#	*Step*		*Value*	*Notes*
1	*Ageing Vessel initial weight (should be >1500Kg)*	W_o		
2	*Ageing vessel final weight after adding X KG*	W_f		
3	*Expected Vessel Weight*	W_e=Wo+X		
4	*Deviation Percentage*	DV=(We-Wf)/Wf*100		

Note : If the deviation percentage exceeds + or - 1% Perform dynamic calibration and adjustment.

X = 600Kg

Conduct an healthcheck by testing with 100kg to ascertain loadcell's sensitivity to minimum weight

Comments:

Name/Sign/Date ……

Name/Sign/Date ……

4TH EYE CHECK

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08-June-2023	Date: 08/June/23	Date: 08-June 2023

Ugee Chemicals Ltd
Fabric & Home Care
MSG

Enzyme feeder Load Cell Static Calibration Report.

Calibration Date : ……/……/……

Shift :

Calibration Operator:……

					Note : Deviation Percentage Must not Exceed + or - 1%
Calibration Reason	*Failure*	*Planned*	*Complaint*		*Other Reasons*
Description					

Before Repair Data:

Visual Check	*Parts*
OK	
NOT OK	

Pre verification Checklist :

Follow the next procedure during the Brabender feeder scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Ok	Not ok	Notes
1	Check that the Enzyme feeder is free moving and the load cell suspenders are in a good condition			
2	Check that the Enzyme feeder infeed pipe don't have sticky buildups forming rigid connection to the vessle			
3	Check that all flexible connectors on the vessle are in good shape			
4	Check that there is no foreign object on the Enzyme feeder			
5	With the discharge valve closed. Read-off Weight measurement from RC4 display (L1). Add dead weights of known mass (X kg). X=8 kg			
6	Read-off Weight measurement which essentially sums Enzyme feeder content and weights (L2)			

Static Calibration Steps :

#	*Step*		*F1*	*F2*	*F3*	*F4*	*F5*	*F6*	*Notes*
1	*Enzyme feeder initial weight*	*L1*							
2	*Enzyme feeder weight after adding X KG*	*L2*							
3	*Expected Weight*	*X*							
4	*Actual weight*	*A = L2-L1*							
5	*Deviation Percentage*	*DV=(X-A)/X*100*							

Note : If the deviation percentage exceeds + or - 1% Perform dynamic calibration and adjustment.
X = 8Kg

Comments:

Name/Sign/Date ……
Calibration Operator.

Name/Sign/Date ……
4TH EYE CHECK

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08-June-2023	Date: 08/June/23	Date: 08-June 2023

Ugee Chemicals Ltd
Fabric & Home Care
MSG

LIW Line 1 feeders Load Cell Static Calibration Report.

Calibration Date : ...../...../.....

Shift :

Calibration Operator:.....

Calibration Reason	*Failure*	*Planned*	*Complaint*		*Note : Deviatom Percentage Must not Exceed + or - 1%*
Description					*Other Reasons*

Before Repair Data:	*Parts*
Visual Check	
OK	
NOT OK	

Pre verification Checklist :

Follow the next procedure during the Brabender feeder scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Ok	Not ok	Notes
1	Check that the Admix LIW feeder is free moving and the load cell suspenders are in a good condition			
2	Check that the Admix LIW feeder infeed pipe don't have sticky buildups forming rigid connection to the vessle			
3	Check that all flexible connectors on the vessle are in good shape			
4	Check that there is no foreign object on the AdmixLIW feeder			
5	With the discharge valve closed. Read-off Weight measurement from OP12 display (L1). Add dead weights of known mass (X kg).			
6	Read-off Weight measurement which essentially sums Admix LIW feeder content and weights (L2)			

Static Calibration Steps :

#	*Step*		*F1*	*F2*	*F3*	*F4*	*F5*	*F6*	*F7*	*Notes*
1	*Admix LIW feeder initial weight*	*L1*								
2	*Admix LIW feeder weight after adding X KG*	*L2*								
3	*Expected Weight*	*X*								
4	*Auctual Weight*	*A = L2-L1*								
5	*Deviation Percentage*	*DV=(X-A)/X*100*								

Note : If the deviation percentage exceeds + or - 1% Perform dynamic calibration and adjustment.

See the table below for the value of the dead weight (X) for each feeder

Feeder	Percarbonate	HEPMC	TAED	BR 15	AC BASE	SULPHATE	BP REBLEN	FP REBLEN	BP BELT	BH BASE	AE1S	SEA	TRIBLEND
Dead weight (X)	20 KG	20 KG	20 KG	2 KG	2O KG	20 KG	2 KG	2 KG	2 KG	2 KG	20 KG	2 KG	8 KG

Name/Sign/Date .....

Calibration Operator.

Name/Sign/Date .....

4TH EYE CHECK.

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08-June-2023	Date: 08/June/23	Date: 08 - June 2023

Ugee Chemicals Ltd
Fabric & Home Care
MSG

LIW Line 2 feeders Load Cell Static Calibration Report.

Calibration Date : ...../...../.....

Shift :

Calibration Operator:.....

					Note : Deviation Percentage Must not Exceed + or - 1%
Calibration Reason	*Failure*	*Planned*	*Complaint*		*Other Reasons*
Description					

Before Repair Data:

Parts
Visual Check
OK
NOT OK

Pre verification Checklist :

Follow the next procedure during the Brabender feeder scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Ok	Not ok	Notes
1	**Check that the Admix LIW feeder is free moving and the load cell suspenders are in a good condition**			
2	**Check that the Admix LIW feeder infeed pipe don't have sticky buildups forming rigid connection to the vessle**			
3	**Check that all flexible connectors on the vessle are in good shape**			
4	**Check that there is no foreign object on the Admix LIW feeder feeder**			
5	**With the discharge valve closed. Read-off Weight measurement from OP12 display (L2). Add dead weights of known mass (X kg).**			
6	**Read-off Weight measurement which essentially sums Admix LIW feeder content and weights (L2)**			

Static Calibration Steps :

#	*Step*		*F1*	*F2*	*F3*	*F4*	*F5*	*Notes*
1	*Admix LIW feeder initial weight*	*L1*						
2	*Admix LIW feeder weight after adding X KG*	*L2*						
3	*ExpectedWeight*	*X*						
4	*Actual Weight*	*A=L2-L1*						
5	*Deviation Percentage*	*DV=(X-A)/X*100*						

Note : If the deviation percentage exceeds + or - 1% Perform dynamic calibration and adjustment.
See the table below for the value of the dead weight (X) for each feeder

Feeder	percarbonate	HEPMC	TAED	BR 15	AC BASE	SULPHATE	FP REBLEN	MCAS	GD6	BH BASE	AE1S	SEA	TRIBLEND
Dead weight (X)	10 KG	20 KG	20 KG	2 KG	20 KG	20 KG	2 KG	20 KG	8 KG	2 KG	20 KG	2 KG	8 KG

Name/Sign/Date .....
Calibration Operator.

Name/Sign/Date .....
4TH EYE CHECK

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08- June -23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08- June-2023	Date: 08/June/23	Date: 09 - June 2023

Ugee Chemicals Ltd
Fabric & Home Care
MSG

Flowmeter Calibration Check Report.

Calibration Date : ……/……../ ……

Shift :

Calibration Operator: ……

				Note : Deviation Percentage Must not Exceed + or - 1%
Calibration Reason	*Failure*	*Planned*	*Complaint*	*Other Reasons*
Description				

Before Repair Data:

Visual Check	*Parts*
OK	
NOT OK	

Pre verification Checklist :

Follow the next procedure during the Crutcher scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Yes	No	Notes
1	close the manual valve on the line before the auto-valve			
2	place the sample receptacle			
3	open the calibration/drain valve			
4	take the initial weight of the receptacle and return to the drain valve			
5	Record the initial totalized value. The run the pump at 20% if VFd is available. If not, run at full speed			
6	Stop pump when the receptacle is about 80% filled to avoid spillage. Record the final totalized value			
7				

Calibration Steps :

#	*Step*		*Value*	*Notes*
1	*Initial totalized value*	*L1*		
2	*Final totalized value*	*L2*		
3	*Expected value*	*SP = L2-L1*		
4	*Actual value*	*PV*		
5	*Difference*	*A=SP-PV*		
6	*Deviation Percentage*	*DV2=A*100/SP*		

Note : If the deviation percentage exceeds + or - 1% , report OOL and plan a qualified calibration contractor to calibrate flowmeter

Comments:

Name/Sign/Date ……..
Calibration Operator.

Name/Sign/Date ……..
4TH EYE CHECK

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08-June-2023	Date: 08/June/23	Date: 08-JUNE 2023

Procter & Gamble Nig
Fabric & Home Care
MSG

DV99 Load Cell Static Calibration Report.

Calibration Date : ……../……../……..

Shift :

Calibration Operator:……

				Note : Deviation Percentage Must not Exceed + or - 1%
Calibration Reason	*Failure*	*Planned*	*Complaint*	*Other Reasons*
Description				

Before Repair Data:

Visual Check	*Parts*
OK	
NOT OK	

Pre verification Checklist :

Follow the next procedure during the Crutcher scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Yes	No	Notes
1	Check that the DV99 skid is free moving and the load cell suspenders are in a good condition			
2	Check that the DV99 infeed pipe s do not have sticky build up froming rigid connection to the vessel			
3	Check water infeed line for sticky buildup that may be forming rigid connection with vessle			
4	Check that all flexible connectors on the vessle are in good shape			
5	Check that there is no foreign object on DV99 skid			
6	With the discharge valve closed, read off the weight measurement from the IND560 display(Wo). Add dead weight of known mass (Xkg). X=10kg.			
7	Read-off Weight measurement which essentially sumsDV99 skid content and dead weights (W_f)			

Static Calibration Steps :

#	*Step*		*Value*	*Notes*
1	*DV99 tank initial weight*	W_o		
2	*DV99 Tank final weight after adding X KG*	W_f		
3	*Expected Tank Weight*	$W_e=Wo+X$		
4	*Deviation Percentage*	$DV=(We-Wf)/Wf*100$		

Note : If the deviation percentage exceeds + or - 1% Perform dynamic calibration and adjustment.
X = 10Kg

Comments:

Name/Sign/Date ……
Calibration Operator.

Name/Sign/Date ……
4TH EYE CHECK

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
Musa Nasiru Date: 08-June-23	Adedoyin Adebiyi Date: 08-June-2023	Olujide Ajawole Date: 08/June/23	Nadeeb Daramola Date: 08-June 2023

Ugee Chemicals Ltd
Fabric & Home Care
MSG

LIW Load Cell dynamic Calibration Report.

Calibration Date : ……/……/……

Shift :

Calibration Operator:……

					Note : Deviation Percentage Must not Exceed + or - 1%
Calibration Reason	*Failure*	*Planned*	*Complaint*		*Other Reasons*
Description					

Before Repair Data:

Visual Check	*Parts*
OK	
NOT OK	

Pre verification Checklist :

Follow the next procedure during the Brabender feeder scale check and the deviation percentage must not exceed +/- 1% :

No	Term	Ok	Not ok	Notes
1	Check that the Admix LIW feeder is free moving and the load cell suspenders are in a good condition			
2	Check that the Admix LIW feeder infeed pipe don't have sticky buildups forming rigid connection to the vessle			
3	Check that all flexible connectors on the vessle are in good shape			
4	Check that there is no foreign object on the Admix LIW feeder feeder			
5	With the discharge valve closed. Read-off Weight measurement from OP12 display (L2). Add dead weights of known mass (X kg).			
6	Read-off Weight measurement which essentially sums Admix LIW feeder content and weights (L2)			

Static Calibration Steps :

#	*Step*		*F1*	*F2*	*F3*	*F4*	*F5*	*Notes*
1	*Admix LIW feeder initial weight*	*L1*						
2	*Admix LIW feeder weight after adding X KG*	*L2*						
3	*ExpectedWeight*	*X*						
4	*Actual Weight*	*A=L2-L1*						
5	*Deviation Percentage*	*DV=(X-A)/X*100*						

Note : If the deviation percentage exceeds + or - 1% Perform dynamic calibration and adjustment.
See the table below for the value of the dead weight (X) for each feeder

Name/Sign/Date ……
Calibration Operator.

Name/Sign/Date ……
4TH EYE CHECK

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08-June-2023	Date: 08th June 23	Date: 08 - JUNE 2023

Ugee Chemicals Ltd
Fabric & Home Care
MSG

CALIBRATION SCHEDULE

Equipment	Last Done	Frequency (days)	Due date	Done date	Done/Not Done

Name/Sign/Date .....
Calibration Operator.

Name/Sign/Date .....
4TH EYE CHECK

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date: 08-June-23	Date: 08-June-2023	Date: 08/June/23	Date: 09 - June 2023

Ugee Chemicals Ltd
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L12/L24 BARCODE SCANNER VERIFICATION

	TASK	Expected Result	Observed Result	Status (Y/N)
L24 HOISTS	Without scanning any material label, try to use the hoists one after the other to lift material	All the hoists are blocked for use		
	Scan the material label on MCAS big bag. Try to use all the hoists to lift material	MCAS hoist is released for use All other hoists are blocked		
	Scan the material label on Percarbonate big bag. Try to use all the hoists to lift material	Percarbonate hoist is released for use All other hoists are blocked		
	Scan the material label on AC Base big bag. Try to use all the hoists to lift material	AC Base hoist is released for use All other hoists are blocked		
	Scan the material label on Sulphate big bag. Try to use all the hoists to lift material	Sulphate hoist is released for use All other hoists are blocked		
	Scan the material label on Triblend big bag. Try to use all the hoists to lift material	Triblend hoist is released for use All other hoists are blocked		
	Scan the material label on SEA big bag. Try to use all the hoists to lift material	SEA hoist is released for use All other hoists are blocked		
	Scan the material label on HEPMC big bag. Try to use all the hoists to lift material	HEPMC hoist is released for use All other hoists are blocked		
L12 HOISTS	Without scanning any material label, try to use either L12 sulphate or L12 Carbonate hoist to lift material	Both hoists are blocked for use		
	Scan the material label on Sulphate big bag. Try to use all the hoists to lift material	L12 Sulphate hoist is released for use All other hoists are blocked		
	Scan the material label on Carbonate big bag. Try to use all the hoists to lift material	L12 Carbonate hoist is released for use All other hoists are blocked		
FP Reblend	Scan the material label on FP Reblend Dumpspot at L24	FP Reblend Setpoint on the Admix Production Page changes automatically according to the Reblend Matrix		
L12 Perfume Skid	Without scanning any material label, try to load material into either perfume tank by pressing the start push button for the unloading pump on the corresponding perfume tank	Both perfume tanks are blocked for unloading/refilling		
	Scan the material label on Spotlight perfume. Try to start the unloading pumps for both perfumes	Spotlight unloading pump is released for use Bel Mondo unloading pump is blocked is blocked		
	Scan the material label on Bel Mondo perfume. Try to start the unloading pumps for both perfumes	Bel Mondo unloading pump is released for use Spotlight unloading pump is blocked is blocked		

Name/Sign/Date .....
Calibration Operator

Name/Sign/Date .....
4TH EYE CHECK

SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru	Adedoyin Adebiyi	Olujide Alawode	Nadeeb Daramola
Date:	Date: 08-June-2023	Date: 08/June/23	Date: 08-June 2023

ATTACHMENT 15

P&G Nigeria	Job Aid ENZYME FEEDER CALIBRATION Originator: Musa Nasiru	Issue Date: 16-Sept.-20 Job Aid No: MSG Job aid 017.0 Page: 1 of 4

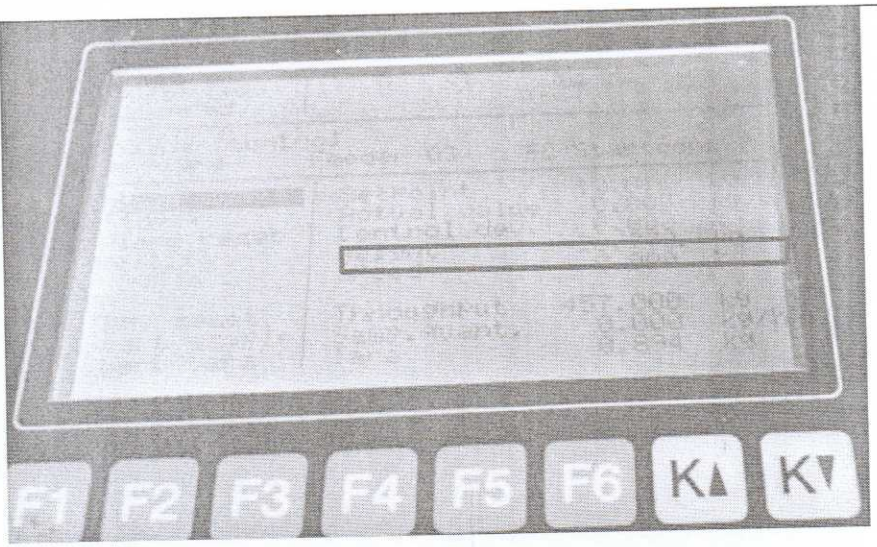
Purpose To ensure accuracy of enzyme dosage

Start Whenever enzyme feeder calibration is planned

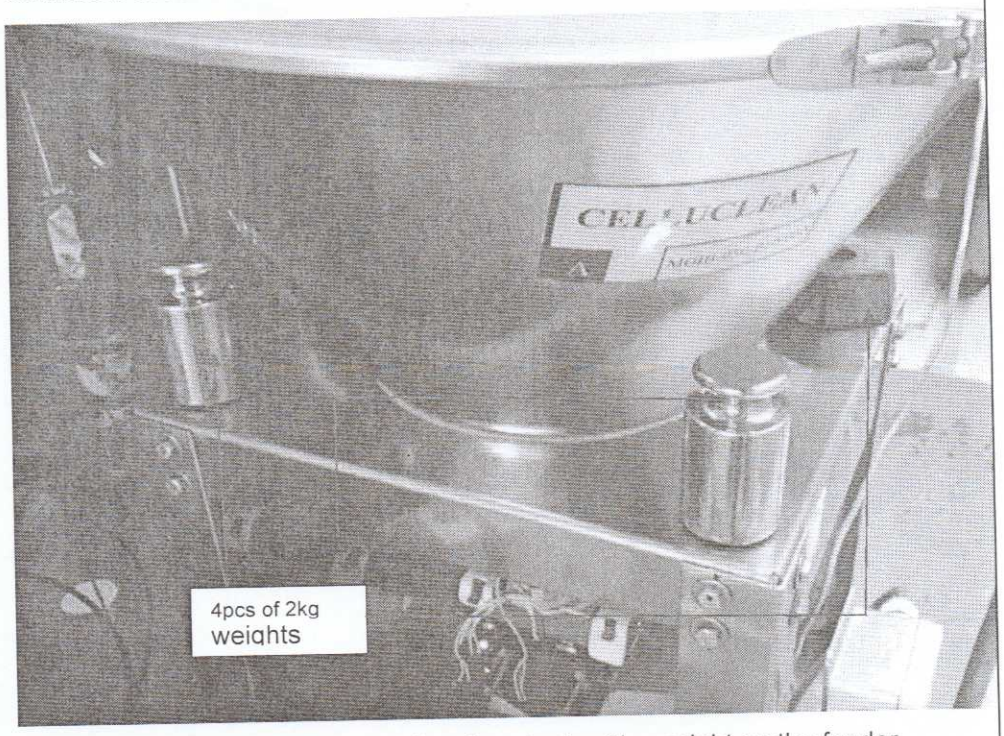
Materials
- This job aid
- Cotton gloves, latex gloves, 3M600 nose mask

Actions	Steps
1. Prepare for calibration	1. Collect 8 kg (4 pieces of standard 2kg weight) from storage location at L18 and move to L21(enzyme room). 2. Stop mixing operation. 3. Check that the feeder is stopped, and that hopper refill valve is in closed position 4. Inspect all flexible connectors on the feeder and remove any source of vibration. 5. Check that the infeed and outfeed points do not have sticky build up forming rigid connection to the vessel 6. Check that there are no foreign objects on the feeder 7. Check that the enzyme feeder is free moving and that load cell suspenders are in good condition 8. Check that the feeder/tray is clean and free of material build up.
2. Perform calibration check	1. Read the initial weight of the feeder from the RC4 (enzyme feeder HMI). Record this value as L1(Initial Weight) in the calibration check sheet.

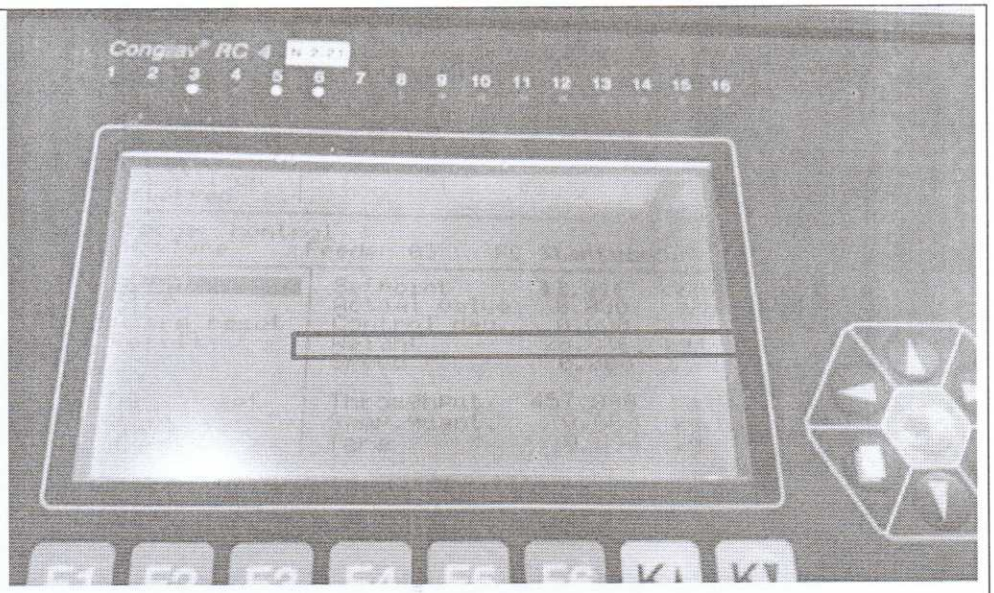
SOP OWNER	HSE APPROVAL	QA APPROVAL	AUTHORISATION
08-June-23			
Musa Nasiru Date:	Adedoyin Adebiyi Date: 08-June-2023	Olujide Alawode Date: 08/June/23	Nadeeb Daramola Date: 08 June 2023

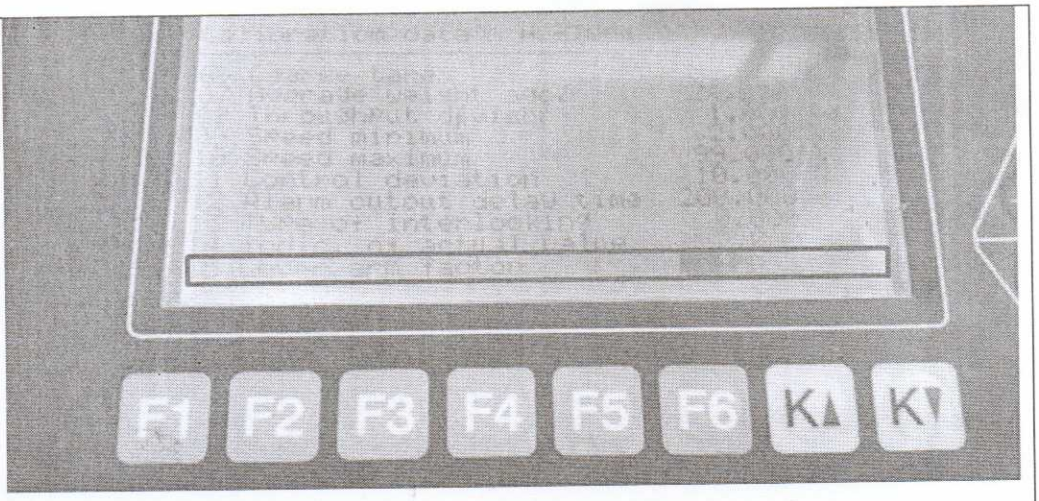


2. Put 8Kg (4 pieces of 2kg each) standard weight on the marked positions on the four edges of the feeder. Record this value as X (Expected Weight) in the calibration check sheet



3. Record the final weight of the feeder after placing 8kg weight on the feeder. Record this value as L2(Final Weight) in the calibration check sheet

	 4. Compute the Actual Weight (A) measurement by the load cell as follows Actual Weight = Final weight -Initial weight= L2-L1. Record this value as A in the calibration check sheet 5. Calculate the feeder deviation (DV) using the formula DV = (Expected Weight- Actual Weight) X100/Expected Weight = (X-A) X100/X Where X = Expected Weight =standard weight used for calibration A = Actual weight = Final Weight-Initial Weight = L2-L1 DV = Deviation (in %) 6. Record the value of the Deviation in the calibration check sheet 7. Remove the standard weight and return to the storage location at L18
3. Perform Lever Arm Factor adjustment if the Deviation (DV) is more than ±1% Note that Lever Arm Factor adjustment is the exclusive responsibility of MSG Process Engineer	1. Empty the feeder completely. 2. Clean the feeder of all accumulation and restore to base condition 3. Read the weight display on RC4. The value should be 0(zero), Otherwise press ▼ on the RC4 to scroll down and select **'auto tare'** and then press CR to perform auto tare on the feeder 4. Using the ▼ button on the RC4 scroll down to select 'lever arm factor'. Read and record the value as Actual Lever Arm Factor (LFact).



5. Compute new Lever Arm Factor (LFnew) as below
   Read feeder initial weight and record the value as Wo
   Place a test weight. Record the value of test weight as Wt
   Read the feeder final weight and record the value as W1
   LFnew = LFact X(Wt/(W1-Wo)
   Enter password XXXX on the RC4
   Enter the new lever arm factor and press CR to save the value

6. Repeat the calibration procedure and confirm the deviation is between 0and ±1%

Result:

Calibration error is less than 1%
Calibration checklist is properly filled

Task Standard:

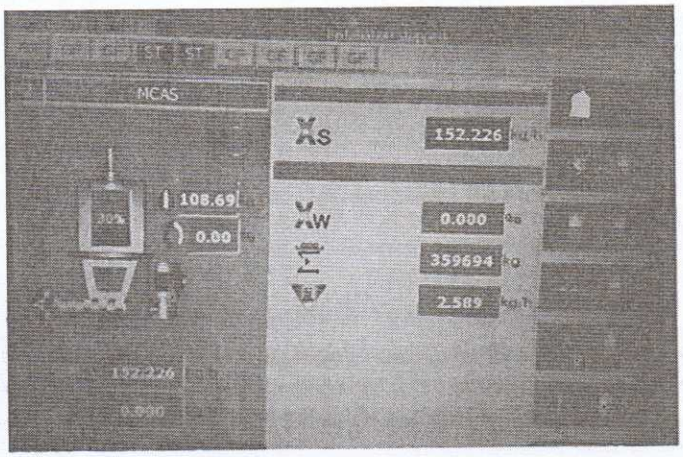
1 No delay in operation due to lack of communication

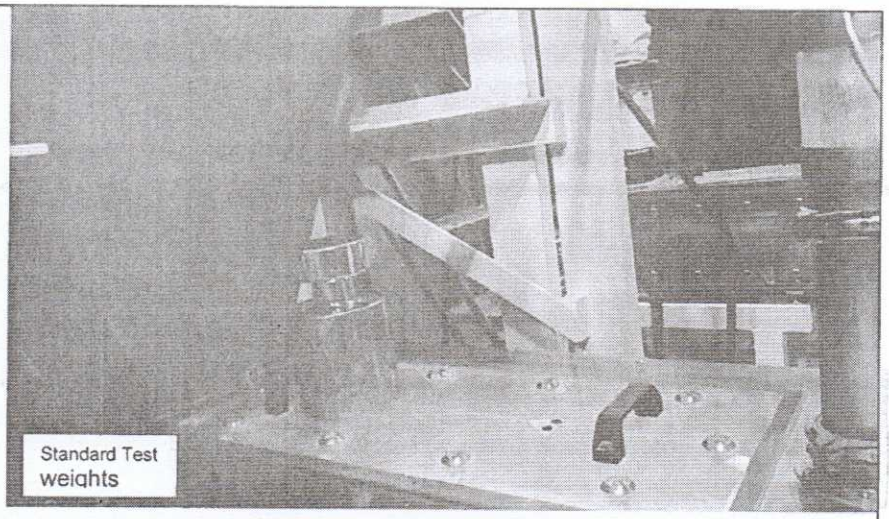
P&G Nigeria	Job Aid LIW FEEDER CALIBRATION Originator: Musa Nasiru	Issue Date: 16-Sept.-20 Job Aid No: MSG Job aid 018.0 Page: 1 of 4

Purpose To ensure accuracy of Admix Material dosage

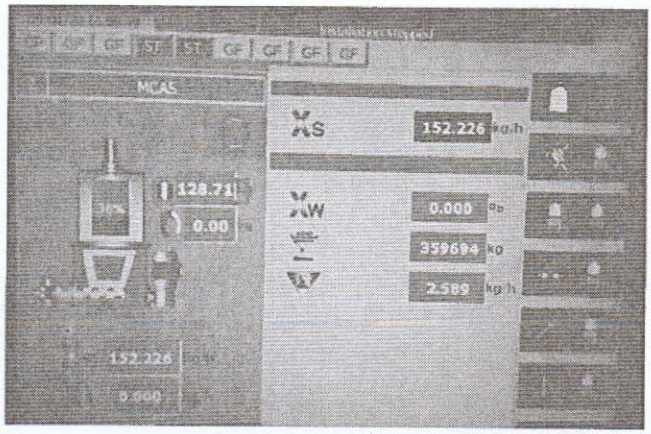
Start Whenever LIW feeder calibration is planned

Materials
- This job aid
- Cotton gloves, latex gloves, 3M600 nose mask

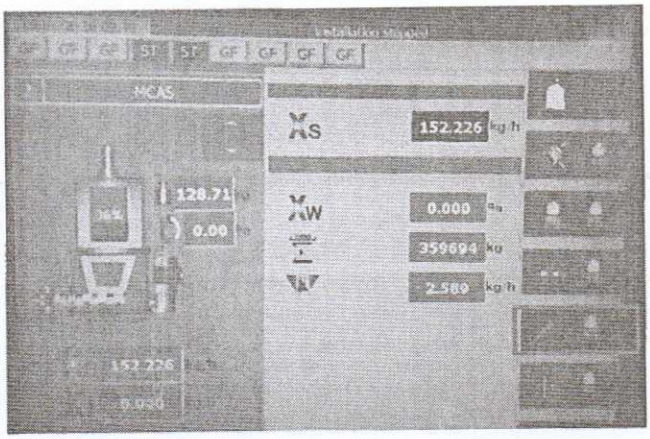
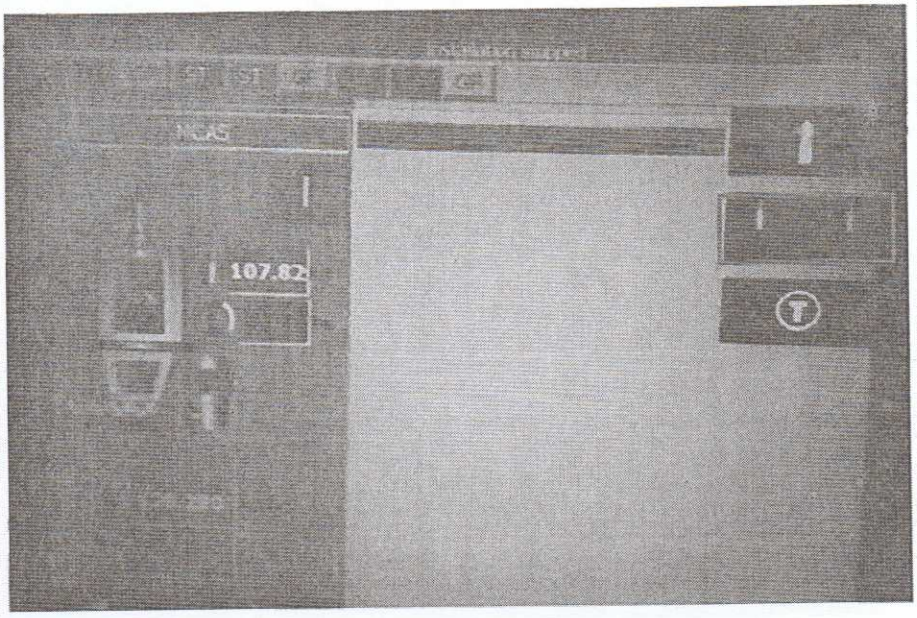
Actions	Steps
1. Prepare for calibration	1. Collect standard test weight from storage location at L18 and move to the feeder 2. Stop mixing operation. 3. Check that the feeder is stopped, and that hopper refill valve is in closed position 4. Inspect all flexible connectors on the feeder and remove any source of vibration. 5. Check that the infeed and outfeed points do not have sticky build up forming rigid connection to the vessel 6. Check that there are no foreign objects on the feeder 7. Check that the LIW feeder is free moving and that load cell suspenders are in good condition 8. Check that the feeder is clean and free of material build up.
2. Perform calibration check	1. Read the initial weight of the feeder from the OP12 (L18 LIW feeder HMI). Record this value as L1(Initial Weight) in the calibration check sheet.  2. Put standard test weight on the marked positions on the feeder. Record this value as X (Expected Weight) in the calibration check sheet

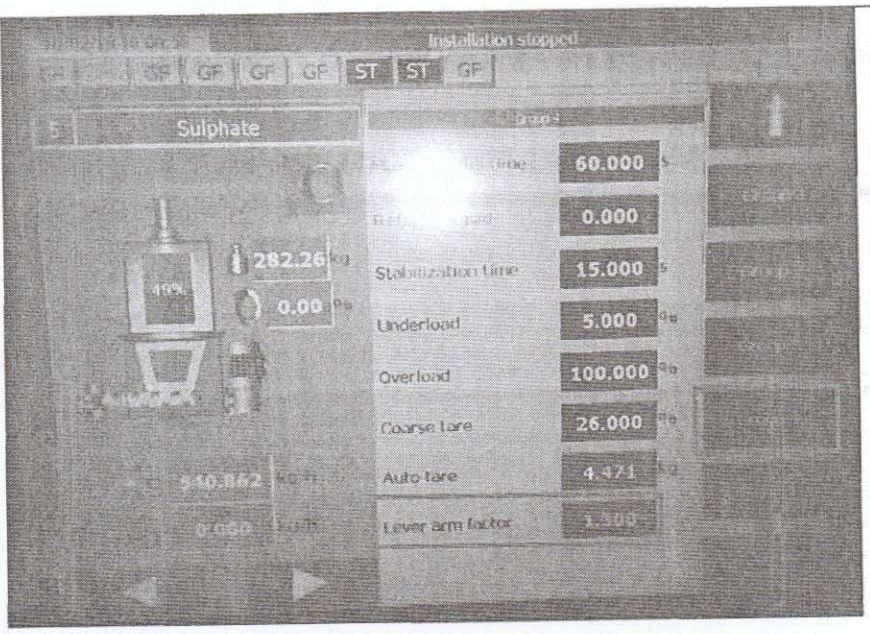


3. Record the final weight of the feeder after placing standard weight on the feeder.
   Record this value as L2(Final Weight) in the calibration check sheet



4. Compute the Actual Weight (A) measurement by the load cell as follows
   Actual Weight = Final weight -Initial weight= L2-L1.
   Record this value as A in the calibration check sheet
5. Calculate the feeder deviation (DV) using the formula
   DV = (Expected Weight- Actual Weight) X100/Expected Weight
   = (X-A) X100/X
   Where
   X = Expected Weight =standard weight used for calibration
   A = Actual weight = Final Weight-Initial Weight = L2-L1
   DV = Deviation (in %)
6. Record the value of the Deviation in the calibration check sheet
7. Remove the standard weight and return to the storage location at L18

3. Perform Lever Arm Factor adjustment if the Deviation (DV) is more than ±1% Note that Lever Arm Factor adjustment is the exclusive responsibility of MSG Process Engineer	1. Empty the feeder completely. 2. Clean the feeder of all accumulation and restore to base condition 3. Read the weight display on OP12. The value should be 0(zero), Otherwise press  on the OP12 HMI to scroll down to select calibration menu select  4. ON the calibration menu page press  button to perform auto tare on the feeder.  5. Scroll to group parameter page and select "Group 4"



6. Read and record the value of Lever Arm Factor as Actual Lever Arm Factor (LFact).
7. Compute new Lever Arm Factor (LFnew) as below
   Read feeder initial weight and record the value as Wo
   Place a test weight. Record the value of test weight as Wt
   Read the feeder final weight and record the value as W1

LFnew = LFact X (Wt/(W1-Wo

Enter the New Lever Arm Factor

8. Repeat the calibration procedure and confirm the deviation is between 0and ±1%

Result:

Calibration error is less than 1%

Calibration checklist is properly filled

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