

II. Repeatability Test at Half and Full Load

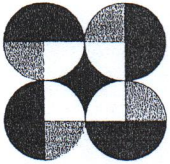
Load (g)	Difference (g)	Maximum Permissible Error (MPE)
500	0.0	± 3.0 g
1000	0.0	± 3.0 g

III. Departure from Nominal Value (Increasing & Decreasing Load)

Load (g)	Increasing Load Reading (g)	Error (g)	Decreasing Load Reading (g)	Error (g)	Maximum Permissible Error (MPE)	Uncertainty of Measurement (\pm g)
10	10.0	0.0	10.0	0.0	± 1.0 g	0.38
20	20.0	0.0	20.0	0.0	± 1.0 g	0.38
50	50.0	0.0	50.0	0.0	± 1.0 g	0.38
100	100.0	0.0	100.0	0.0	± 2.0 g	0.38
200	200.0	0.0	200.0	0.0	± 2.0 g	0.38
500	500.0	0.0	500.0	0.0	± 3.0 g	0.38
750	751.0	1.0	751.0	1.0	± 3.0 g	0.38
1000	1001.0	1.0	1001.0	1.0	± 3.0 g	0.38

Environmental Conditions : Relative Humidity : 48.0%
 Ambient Temperature : 25.7°C

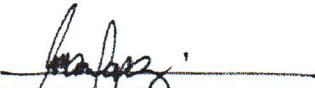
Counter Weights	Number of Holes	Number of Leaded Holes
10 g	-	-
20 g (1)	-	-
20 g (2)	-	-
50 g	-	-
100 g	-	-
200 g (1)	-	-
200 g (2)	-	-
500 g	-	-



IV. Remarks:

1. The uncertainty of measurement is estimated at 95% level of confidence with a coverage factor $k=2$.
2. The above values are those obtained at the time of test and refer only to the particular instrument calibrated.
3. The end-user shall determine the suitability of this instrument for its intended use.
4. This report shall not be reproduced in any form, except in full, without written approval of the laboratory.

Calibrated by:

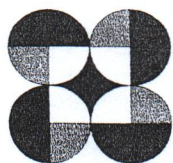

ENGR. MANOLITO R. TAPANGAN
Laboratory Analyst

Reviewed by:


GIDEON M. TANGHAL
Laboratory Analyst

Certified Correct and
Approved for Release by:


JENNIFER J. DEJARME
Chief Laboratory Analyst



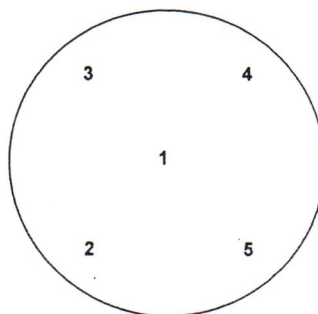
TEST REPORT
07-2017-BAL-212Met

Sample No. : Met-455
Type of Job : ON-SITE CALIBRATION
Date Calibrated : July 18, 2017
Sample : Top Loading Balance
Manufacturer : AND
Model : FX-300
Serial No. : 5007321
Resolution : 0.001 g
Capacity : 310 g
Company : **SURIGAO STATE COLLEGE OF TECHNOLOGY**
Address : Narciso Street, Surigao City
Page : 1 of 2

This instrument was calibrated using reference standard traceable to SI Units as maintained by the National Metrology Laboratory- ITDI, Philippines. The following results were obtained:

I. Eccentricity Test, 200 g

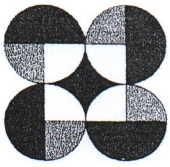
Load Position	Indication (g)	Deviation of Indication relative to the center (mg)
Ave. Center (1)	200.044	
front left (2)	200.047	3.50
back left (3)	200.047	3.50
back right (4)	200.040	-3.50
front right (5)	200.040	-3.50



II. Repeatability Test

Using a test load of 200 g for ten (10) measurements, the standard deviation is 0.632 mg.

OP-026-F17
Revision 0



III. Test for Errors of Indication

Measurement Number	Test Load (g)	Indication (g)	Error (g)	Uncertainty of Measurement (\pm g)
1	0.0000	0.000	0.000	0.001
2	1.0000	0.997	-0.003	0.001
3	20.0000	20.001	0.001	0.001
4	75.0000	75.012	0.012	0.002
5	150.0001	150.029	0.029	0.002
6	225.0003	225.050	0.050	0.002
7	300.0003	300.066	0.066	0.002

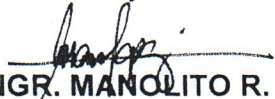
UNCERTAINTY OF MEASUREMENT:

The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor $k=2$. It has been determined in accordance with EA-4/02 M: 2013. The value of the measurand lies within the assigned range of values with a probability of 95%.

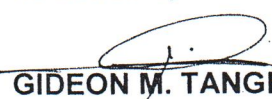
IV. Remarks:

1. The above values are those obtained at the time of test and refer only to the particular instrument calibrated.
2. The end-user shall determine the suitability of this instrument for its intended use.
3. This report shall not be reproduced in any form, except in full, without written approval of the laboratory.

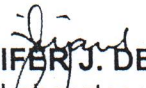
Calibrated by:


ENGR. MANOLITO R. TAPANGAN
Laboratory Analyst

Reviewed by:

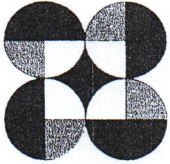

GIDEON M. TANGHAL
Laboratory Analyst

Certified Correct and
Approved for Release by:


JENNIFER J. DEJARME
Chief Laboratory Analyst

Page: 2 of 2

OP-026-F17
Revision 0



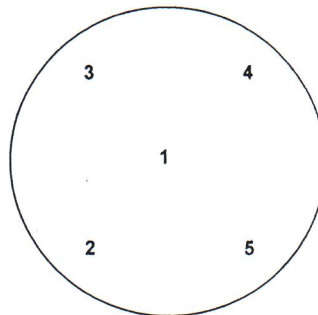
TEST REPORT
07-2017-BAL-212Met

Sample No. : Met-456
Type of Job : ON-SITE CALIBRATION
Date Calibrated : July 18, 2017
Sample : Top Loading Balance
Manufacturer : AND
Model : FX-300
Serial No. : 5007314
Resolution : 0.001 g
Capacity : 310 g
Company : **SURIGAO STATE COLLEGE OF TECHNOLOGY**
Address : Narciso Street, Surigao City
Page : 1 of 2

This instrument was calibrated using reference standard traceable to SI Units as maintained by the National Metrology Laboratory- ITDI, Philippines. The following results were obtained:

I. Eccentricity Test, 200 g

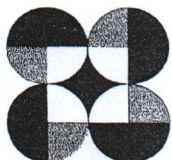
Load Position	Indication (g)	Deviation of Indication relative to the center (mg)
Ave. Center (1)	200.013	
front left (2)	200.011	-2.00
back left (3)	200.018	5.00
back right (4)	200.013	0.00
front right (5)	200.008	-5.00



II. Repeatability Test

Using a test load of 200 g for ten (10) measurements, the standard deviation is 0.483 mg.

OP-026-F17
Revision 0



III. Test for Errors of Indication

Measurement Number	Test Load (g)	Indication (g)	Error (g)	Uncertainty of Measurement (\pm g)
1	0.0000	0.00	0.00	0.000
2	50.0000	50.00	0.00	0.000
3	200.0003	200.00	0.00	0.001
4	1500.0008	1500.00	0.00	0.009
5	3000.0049	3000.00	0.00	0.019
6	4500.0058	4500.00	-0.01	0.028
7	5999.9989	5999.97	-0.03	0.038

UNCERTAINTY OF MEASUREMENT:

The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor $k=2$. It has been determined in accordance with EA-4/02 M: 2013. The value of the measurand lies within the assigned range of values with a probability of 95%.

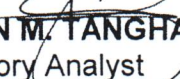
IV. Remarks:

1. The above values are those obtained at the time of test and refer only to the particular instrument calibrated.
2. The end-user shall determine the suitability of this instrument for its intended use.
3. This report shall not be reproduced in any form, except in full, without written approval of the laboratory.

Calibrated by:


ENGR. MANOLITO R. TAPANGAN
Laboratory Analyst

Reviewed by:


GIDEON M. TANGHAL
Laboratory Analyst

Certified Correct and
Approved for Release by:


JENNIFER J. DEJARME
Chief Laboratory Analyst

Page: 2 of 2

OP-026-F17
Revision 0



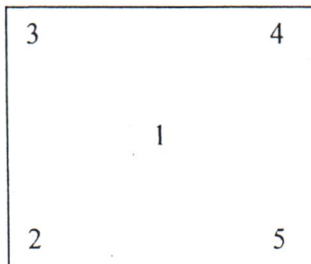
TEST REPORT
07-2017-BAL-212Met

Sample No. : Met-458
Type of Job : ON-SITE CALIBRATION
Date Calibrated : July 18, 2017
Sample : Top Loading Balance
Manufacturer : KERN
Model : EW 6200-2NM
Serial No. : 151203150
Resolution : 0.01 g
Capacity : 6200 g
Company : **SURIGAO STATE COLLEGE OF TECHNOLOGY**
Address : Narciso Street, Surigao City
Page : 1 of 2

This instrument was calibrated using reference standard traceable to SI Units as maintained by the National Metrology Laboratory- ITDI, Philippines. The following results were obtained:

I. Eccentricity Test, 3000 g

Load Position	Indication (g)	Deviation of Indication relative to the center (mg)
Ave. Center (1)	2999.98	
front left (2)	2999.97	-5.00
back left (3)	2999.96	-15.00
back right (4)	2999.98	5.00
front right (5)	2999.99	15.00



II. Repeatability Test

Using a test load of 3000 g for ten (10) measurements, the standard deviation is 5.270 mg.

OP-026-F17
Revision 0



III. Test for Errors of Indication

Measurement Number	Test Load (g)	Indication (g)	Error (g)	Uncertainty of Measurement (\pm g)
1	0.0000	0.00	0.00	0.011
2	50.0000	50.00	0.00	0.011
3	200.0003	200.00	0.00	0.011
4	1500.0008	1500.00	0.00	0.014
5	3000.0049	3000.00	0.00	0.022
6	4500.0058	4499.98	-0.03	0.030
7	5999.9989	5999.96	-0.04	0.039

UNCERTAINTY OF MEASUREMENT:

The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor $k=2$. It has been determined in accordance with EA-4/02 M: 2013. The value of the measurand lies within the assigned range of values with a probability of 95%.

IV. Remarks:

1. The above values are those obtained at the time of test and refer only to the particular instrument calibrated.
2. The end-user shall determine the suitability of this instrument for its intended use.
3. This report shall not be reproduced in any form, except in full, without written approval of the laboratory.

Calibrated by:

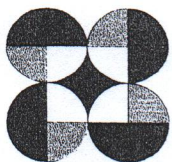
ENGR. MANOLITO R. TAPANGAN
Laboratory Analyst

Reviewed by:

GIDEON M. TANGHAL
Laboratory Analyst

Certified Correct and
Approved for Release by:

JENNIFER J. DEJARME
Chief Laboratory Analyst



II. Repeatability Test at Half and Full Load

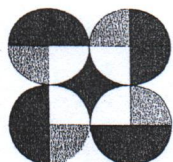
Load (g)	Difference (g)	Maximum Permissible Error (MPE)
500	0.0	± 0.1 g
1000	0.0	± 0.2 g

III. Departure from Nominal Value (Increasing & Decreasing Load)

Load (g)	Increasing Load Reading (g)	Error (g)	Decreasing Load Reading (g)	Error (g)	Maximum Permissible Error (MPE)	Uncertainty of Measurement (\pm g)
10	10.0	0.0	10.0	0.0	± 0.1 g	0.06
20	20.0	0.0	20.0	0.0	± 0.1 g	0.06
50	50.0	0.0	50.0	0.0	± 0.1 g	0.06
100	100.0	0.0	100.0	0.0	± 0.1 g	0.06
200	200.0	0.0	200.0	0.0	± 0.1 g	0.06
500	500.0	0.0	500.0	0.0	± 0.1 g	0.06
750	750.0	0.0	750.0	0.0	± 0.2 g	0.06
1000	1000.0	0.0	1000.0	0.0	± 0.2 g	0.06

Environmental Conditions : Relative Humidity : 49.0%
Ambient Temperature : 25.5°C

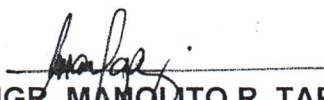
Counter Weights	Number of Holes	Number of Leaded Holes
10 g	-	-
20 g (1)	-	-
20 g (2)	-	-
50 g	-	-
100 g	-	-
200 g (1)	-	-
200 g (2)	-	-
500 g	-	-




IV. Remarks:

1. The uncertainty of measurement is estimated at 95% level of confidence with a coverage factor $k=2$.
2. The above values are those obtained at the time of test and refer only to the particular instrument calibrated.
3. The end-user shall determine the suitability of this instrument for its intended use.
4. This report shall not be reproduced in any form, except in full, without written approval of the laboratory.

Calibrated by:


ENGR. MANOLITO R. TAPANGAN
Laboratory Analyst

Reviewed by:


GIDEON M. TANGHAL
Laboratory Analyst

Certified Correct and
Approved for Release by:


JENNIFER J. DEJARME
Chief Laboratory Analyst