

Traceable Certificate Number: 3362586F
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 1 kg Satin Finish Weight, ASTM Class 1, S/N 85067
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-18 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

The Uncertainty assigned to the Conventional Mass values are the result of the root-sum-square of the type A and type B components, calculated in accordance with NIST SOP 29 and the Guide to the expression of uncertainty in measurement, with coverage factor (k=2), to express the expanded uncertainty with an approximate 95.45% confidence level. This report is not to be used to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any government agency. **This document and all data within, shall not be reproduced, except in full, without the written approval of Rice Lake Weighing Systems.**

Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
Rice Lake Weighing Systems® • PN 64784 • 12/21
 230 West Coleman Street • Rice Lake, WI 54868 • USA
 TEL: 715-234-9171 • FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NC SL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586F
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.88 °C
 Pressure Range: 725.35 mmHg
 Relative Humidity Range: 48 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 1 kg	85067	1.00000160	1.60	0.99999873	-1.27	0.13	2.5	Y	7.85	SS	II	699Q	L595Q	1.1366	A

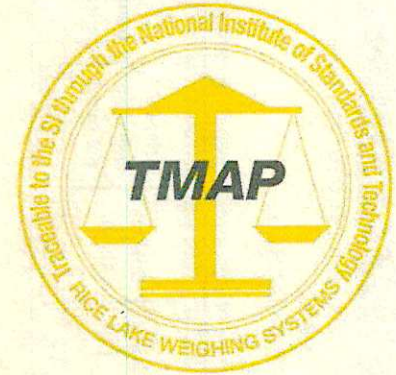
Traceable Certificate Number: 3362586G
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 1 kg Satin Finish Weight, ASTM Class 1, S/N 17727
Comments:



Key Notes

- Finish ✱ Indicates the weight does not meet the finish requirements
- Material ⊕ Indicates the weight does not meet the material requirements
- New Wt ◇ Indicates new weight
- Missing Wt ▲ Indicates replaced missing weight with new weight
- Damaged Wt ✕ Indicates replaced damaged weight
- Replaced OOT ★ Indicates replaced out of tolerance weight
- OOT ⊠ Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt ★★ Indicates replaced magnetic weight
- Design ⊗ Indicates the weight does not meet the design or shape requirements
- Repainted 🗑 Indicates the weight was repainted after As Found obtained
- Other ⊕ See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-18 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

The Uncertainty assigned to the Conventional Mass values are the result of the root-sum-square of the type A and type B components, calculated in accordance with NIST SOP 29 and the Guide to the expression of uncertainty in measurement, with coverage factor ($k=2$), to express the expanded uncertainty with an approximate 95.45% confidence level. This report is not to be used to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any government agency. **This document and all data within, shall not be reproduced, except in full, without the written approval of Rice Lake Weighing Systems.**

Dan Demers
 Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
Rice Lake Weighing Systems® • PN 64784 • 12/21
 230 West Coleman Street • Rice Lake, WI 54868 • USA
 TEL: 715-234-9171 • FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NCSL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586G
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.86 °C
 Pressure Range: 725.34 mmHg
 Relative Humidity Range: 50 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 1 kg	17727	1.00000235	2.35	0.99999948	-0.52	0.13	2.5	Y	7.85	SS	II	699Q	L595Q	1.1365	A

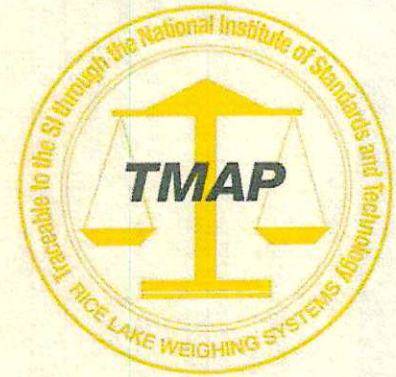
Traceable Certificate Number: 3362586H
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 1 kg Satin Finish Weight, ASTM Class 1, S/N 6034.
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-18 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

The Uncertainty assigned to the Conventional Mass values are the result of the root-sum-square of the type A and type B components, calculated in accordance with NIST SOP 29 and the Guide to the expression of uncertainty in measurement, with coverage factor (k=2), to express the expanded uncertainty with an approximate 95.45% confidence level. This report is not to be used to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any government agency. **This document and all data within, shall not be reproduced, except in full, without the written approval of Rice Lake Weighing Systems.**

Dan Demers, Metrologist

08 Apr 2022
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 TEL: 715-234-9171 • FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NC SL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586H
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.84 °C
 Pressure Range: 725.32 mmHg
 Relative Humidity Range: 48 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 1 kg	6034.	1.00000176	1.76	0.99999889	-1.11	0.13	2.5	Y	7.85	SS	II	699Q	L595Q	1.1367	A

Traceable Certificate Number: 3362586K
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 10 kg Satin Finish Grip Handle Weight, ASTM Class 1, S/N 91823
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

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Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
Rice Lake Weighing Systems® PN 64784 ● 12/21
 230 West Coleman Street ● Rice Lake, WI 54868 ● USA
 TEL: 715-234-9171 ● FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NCSL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586K
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.77 °C
 Pressure Range: 726.64 mmHg
 Relative Humidity Range: 49 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 10 kg	91823	10.0000275	27.5	9.9999988	-1.2	2.2	25	Y	7.85	SS	II	124Q	L595Q	1.1390	A

Traceable Certificate Number: 3362586C
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 17
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 100 g Satin Finish Weight, ASTM Class 1, S/N 91787 with dot
Comments:



Key Notes

- Finish * Indicates the weight does not meet the finish requirements
- Material ⊕ Indicates the weight does not meet the material requirements
- New Wt ◇ Indicates new weight
- Missing Wt ▲ Indicates replaced missing weight with new weight
- Damaged Wt ✕ Indicates replaced damaged weight
- Replaced OOT ★ Indicates replaced out of tolerance weight
- OOT ⊠ Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt ★★ Indicates replaced magnetic weight
- Design ⊙ Indicates the weight does not meet the design or shape requirements
- Repainted 🗑 Indicates the weight was repainted after As Found obtained
- Other ⊕ See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

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Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



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 230 West Coleman Street ● Rice Lake, WI 54868 ● USA
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Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NCSL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586C
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.84 °C
 Pressure Range: 726.88 mmHg
 Relative Humidity Range: 50 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 100 g	91787.	100.000282	0.282	99.999995	-0.005	0.029	0.25	Y	7.85	SS	II	1958Q	L595Q	1.1390	A

Traceable Certificate Number: 3362586L
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 17
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 100 g Polished Weight, ASTM Class 1, S/N 39736
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

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- F No cleaning performed

Material Abbreviations

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SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

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Dan Demers, Metrologist

08 Apr 2022
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 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>
 Page 1 of 2



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NC SL-Z540-1:1994 ACCREDITED

Traceable Certificate Number: 3362586L
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.84 °C
 Pressure Range: 726.91 mmHg
 Relative Humidity Range: 49 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
100 g	39736	100.000071	0.071	99.999784	-0.216	0.029	0.25	Y	7.85	SS	II	1958Q	L595Q	1.1392	A

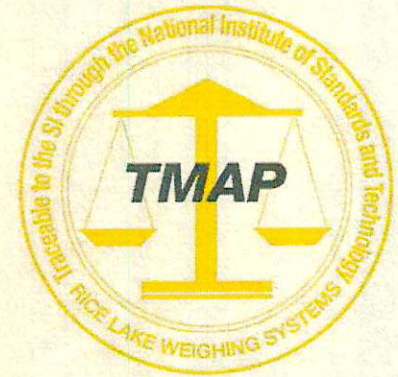
Traceable Certificate Number: 33625861
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 5 kg Satin Finish Grip Handle Weight, ASTM Class 1, S/N 6033
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

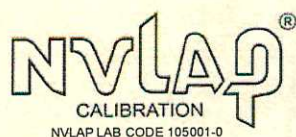
AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-18 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

The Uncertainty assigned to the Conventional Mass values are the result of the root-sum-square of the type A and type B components, calculated in accordance with NIST SOP 29 and the Guide to the expression of uncertainty in measurement, with coverage factor (k=2), to express the expanded uncertainty with an approximate 95.45% confidence level. This report is not to be used to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any government agency. **This document and all data within, shall not be reproduced, except in full, without the written approval of Rice Lake Weighing Systems.**

Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
Rice Lake Weighing Systems® • PN 64784 • 12/21
 230 West Coleman Street • Rice Lake, WI 54868 • USA
 TEL: 715-234-9171 • FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NC SL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586I
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.79 °C
 Pressure Range: 726.58 mmHg
 Relative Humidity Range: 49 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 5 kg	6033	5.00001022	10.22	4.99999588	-4.12	0.99	12	Y	7.85	SS	II	124Q	L595Q	1.1389	A

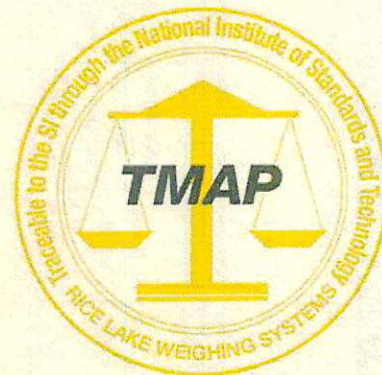
Traceable Certificate Number: 3362586J
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 07 Apr 2022
Recalibration Date: 07 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 17
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 5 kg Satin Finish Weight, ASTM Class 1, S/N 17726 with dot
Comments:



Key Notes

- Finish * Indicates the weight does not meet the finish requirements
- Material ⊕ Indicates the weight does not meet the material requirements
- New Wt ◇ Indicates new weight
- Missing Wt ▲ Indicates replaced missing weight with new weight
- Damaged Wt ✕ Indicates replaced damaged weight
- Replaced OOT ★ Indicates replaced out of tolerance weight
- OOT ⊠ Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt ★★ Indicates replaced magnetic weight
- Design ⊗ Indicates the weight does not meet the design or shape requirements
- Repainted 🎨 Indicates the weight was repainted after As Found obtained
- Other ⊕ See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-18 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

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Dan Demers, Metrologist

07 Apr 2022
 Issued Date:



Prepared By:
Rice Lake Weighing Systems® PN 64784 ● 12/21
 230 West Coleman Street ● Rice Lake, WI 54868 ● USA
 TEL: 715-234-9171 ● FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NC SL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586J
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 07 Apr 2022

Temperature Range: 21.79 °C
 Pressure Range: 714.70 mmHg
 Relative Humidity Range: 50 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 5 kg	17726.	5.0000123	12.3	4.9999980	-2.0	1.1	12	Y	7.85	SS	II	208Q	L595Q	1.1200	A

Traceable Certificate Number: 3362586D
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 500 g Satin Finish Weight, ASTM Class 1, S/N 6036
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-18 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

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Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
Rice Lake Weighing Systems® PN 64784 ● 12/21
 230 West Coleman Street ● Rice Lake, WI 54868 ● USA
 TEL: 715-234-9171 ● FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NCSL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586D
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.92 °C
 Pressure Range: 725.38 mmHg
 Relative Humidity Range: 49 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

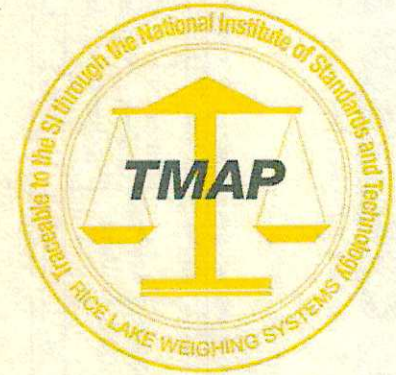
Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 500 g	6036	500.001229	1.229	499.999796	-0.204	0.083	1.2	Y	7.85	SS	II	699Q	L595Q	1.1365	A

Traceable Certificate Number: 3362586E
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply
Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 500 g Satin Finish Weight, ASTM Class 1, 6037.
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-18 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

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Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
Rice Lake Weighing Systems® • PN 64784 • 12/21
 230 West Coleman Street • Rice Lake, WI 54868 • USA
 TEL: 715-234-9171 • FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>
 Page 1 of 2



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NCSL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586E
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.90 °C
 Pressure Range: 725.38 mmHg
 Relative Humidity Range: 49 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
* 500 g	6037.	500.002172	2.172	500.000738	0.738	0.083	1.2	Y	7.85	SS	II	699Q	L595Q	1.1365	A

Traceable Certificate Number: 3362586A
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 07 Apr 2022
Recalibration Date: 07 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 5 g Polished Weight, ASTM Class 1, S/N 12335
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

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Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
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 Page 1 of 2



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NCSL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586A
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 07 Apr 2022

Temperature Range: 21.92 °C
 Pressure Range: 725.37 mmHg
 Relative Humidity Range: 47 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
5 g	12335	4.9999893	-0.0107	4.9999750	-0.0250	0.0033	0.034	Y	7.85	SS	II	2022Q	L595Q	1.1366	A

Traceable Certificate Number: 3362586
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 07 Apr 2022
Recalibration Date: 07 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 28
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 1 g Polished Weight, ASTM Class 1, S/N 12336
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

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Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
Rice Lake Weighing Systems® • PN 64784 • 12/21
 230 West Coleman Street • Rice Lake, WI 54868 • USA
 TEL: 715-234-9171 • FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NC SL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 07 Apr 2022

Temperature Range: 21.92 °C
 Pressure Range: 725.37 mmHg
 Relative Humidity Range: 47 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)															
Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
1 g	12336	1.0000121	0.0121	1.0000092	0.0092	0.0017	0.034	Y	7.85	SS	II	2022Q	L595Q	1.1366	A

Traceable Certificate Number: 3362586B
Contractor: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375-2298

Purchase Order Number: 4280
Client: ILLIANA INSTRUMENTATION SERV
 1831 GOVERT DR
 SCHERERVILLE, IN 46375

Date Received: 05 Apr 2022
Date Calibrated: 08 Apr 2022
Recalibration Date: 08 Apr 2024
NIST Certificate Number: 684/291344-18 & 684/292805-19

If there are two NIST numbers, one or both may apply

Calibrated By: 17
Procedure: WI05-0095 Rev. D
Condition of Weights: Acceptable for Calibration
Description of Weights: 10 g Polished Weight, ASTM Class 1, S/N 12334
Comments:



Key Notes

- Finish Indicates the weight does not meet the finish requirements
- Material Indicates the weight does not meet the material requirements
- New Wt Indicates new weight
- Missing Wt Indicates replaced missing weight with new weight
- Damaged Wt Indicates replaced damaged weight
- Replaced OOT Indicates replaced out of tolerance weight
- OOT Indicates correction plus or minus Uncertainty greater than or equal to MPE
- Magnetic Wt Indicates replaced magnetic weight
- Design Indicates the weight does not meet the design or shape requirements
- Repainted Indicates the weight was repainted after As Found obtained
- Other See comments above

Cleaning Levels

- A Dusted with brush or cloth
- B Spot cleaned with ethyl alcohol
- C Full surface cleaned with ethyl alcohol
- D Spot cleaned with non-alcohol solvent followed by ethyl alcohol
- E Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
- F No cleaning performed

Material Abbreviations

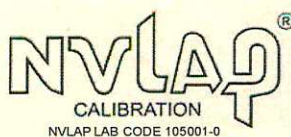
AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-18 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

The Uncertainty assigned to the Conventional Mass values are the result of the root-sum-square of the type A and type B components, calculated in accordance with NIST SOP 29 and the Guide to the expression of uncertainty in measurement, with coverage factor (k=2), to express the expanded uncertainty with an approximate 95.45% confidence level. This report is not to be used to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any government agency. **This document and all data within, shall not be reproduced, except in full, without the written approval of Rice Lake Weighing Systems.**

Dan Demers, Metrologist

08 Apr 2022
 Issued Date:



Prepared By:
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 230 West Coleman Street • Rice Lake, WI 54868 • USA
 TEL: 715-234-9171 • FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>



Certificate of Weight Calibration

ISO/IEC 17025 & ANSI/NC SL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3362586B
 Client: ILLIANA INSTRUMENTATION SERV
 Date Calibrated: 08 Apr 2022

Temperature Range: 21.86 °C to 21.88 °C
 Pressure Range: 726.76 mmHg to 726.85 mmHg
 Relative Humidity Range: 48 % to 50 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
10 g	12334	10.0000449	0.0449	10.0000162	0.0162	0.0093	0.050	Y	7.85	SS	II	1958Q	L595Q	1.1389	A

As Found Data

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
10 g	12334	9.9999561	-0.0439	9.9999274	-0.0726	0.0093	0.050	N <input checked="" type="checkbox"/>	7.85	SS	II	1958Q	L595Q	1.1388	A