Multiple Dimension Measuring Device Work Group
May 3-4, 2023

Ohio Department of Agriculture
Administration Building
8995 East Main Street
Reynoldsburg, Ohio 43068
May 3: 9:00 a.m. - 5:00 p.m. / May 4: 9:00 a.m. - 12:00 p.m.

Meeting Agenda

Schedule

i.	**Welcome and Introductions**	*(Chris Senneff)*
ii.	**Sector secretary assignment**	*(D. Flocken / C. Senneff)*
iii.	**Report – 2022 Interim and Annual Meeting and 2023 NCWM Interim Meeting**	*(D. Flocken)*
iv.	**Report – Recent Measurement Canada Type Evaluation Activity**	*(P. Turgeon)*
v.	**Report – Recent NTEP MDMD Type Evaluation Activity**	*(T. Buck / Jeff Gibson)*
1.	**Review changes to Handbook 44, MDMD code since the last meeting**	*(D. Flocken)*
2.	**Measurement Canada update**	*(P. Turgeon)*
3.	**Review OIML Activity Related to R129**	*(P. Turgeon/J. Konijnenburg)*
4.	**Review changes to the 2022 & 2023 editions of Pub 14, MDMD Checklist**	*(D. Flocken)*
5.	**In-Motion Forklift Based Pallet Dimensioning – Work Group Report**	*(J. Gibson)*
6.	**Listing Metric Equivalent "d" Values When Testing in Imperial Units (e.g. inches)**	(*D. Flocken*)
7.	**S&T Committee, Item MDM-22.1 S.1.7. Minimum Measurement**	(*D. Flocken*)
8.	**Any New Items**	*(All)*
9.	**Misc. Items for General Discussion**	*(All)*
	9.1. Review of Measurement Canada organizational changes	*(P. Turgeon)*
	9.2. Discussion of possible Measurement Canada MDMD Training support	*(P. Turgeon)*
	9.3. Discussion to reopen the idea of adding MDMD to the MRA.	*(P. Turgeon)*
	9.4. Acceptance of test data from Measurement Canada	*(P. Turgeon)*
	9.5. Addition of MDMDs to VCAP	*(D. Flocken)*
	9.6. Review of current work group members	*(D. Flocken)*
10.	**Review meeting activities and conclusions**	*(C. Senneff)*
11.	**Define next steps (if needed)**	*(C. Senneff)*
12.	**Next meeting**	*(C. Senneff)*

Welcome and Introduction

i. **Welcome and Introductions** *(C. Senneff)*

ii. **Sector secretary assignment** *(D. Flocken / C. Senneff)*

iii. **Report – 2022 Interim and Annual Meetings and 2023 Interim Meeting** *(D. Flocken)*

During the 2022 NCWM, Interim Meeting in January 2022, the S&T Committee had 1 item dealing with MDMDs. This was the item proposing the removal of the 12 d minimum for handheld tape measuring devices. This topic is discussed further in Item 7 of this agenda.

iv. **Report – Recent Measurement Canada Type Evaluation Activity** *(P. Turgeon)*

v. **Report – Recent NTEP MDMD Type Evaluation Activity** *(T. Buck - Ohio Lab, and Jeff Gibson - NTEP)*

Carry Over Items

1. Review changes to Handbook 44, MDMD code since the last meeting

No 2021 edition of the handbook was printed. The following changes were adopted in 2020 but the voting had to be ratified at the 2021 NCWM Annual Meeting because the 2020 NCWM Meeting and voting were held virtually. The adopted items were added to the handbook in its 2022 edition.

- S.1.3. Negative Values. – ~~Except when in the tare mode, n~~**Negative values shall not be indicated or recorded.**
- Table S.1.6., item 6. ~~Tare~~**Dimensional Offset** (if used[3])
- S.1.7., S.1.8., S.2., and S.2.2.1. – The word "tare" was replaced by the words "Dimensional Offset".
- S.2.2.2. – Net Values, Mathematical Agreement. The entire specification including the table of examples was removed.

No changes were made in the MDMD Code in the 2023 edition of the handbook.

Discussion:

2. Review changes to Measurement Canada MDMD Code, and Terms and Conditions Documents

Discussion, as needed, regarding any changes to the Canadian MDMD Code since the Work Group's May 2019 meeting.

Discussion:

3. Review OIML Activity Related to R129 CD2

Discussion, as needed, regarding the activity of the OIML Committee responsible for revising the International Recommendation 129 for MDMD instruments.

Discussion:

4. Review changes to the 2022 and 2023 editions of Publication 14, MDMD Checklist

The following changes were made to the MDMD Checklist in the 2022 edition of Pub 14.

Section Number	Amendment	Page	Source
D	Added new definition for Dimensional Offset	MDMD-2	2021 MDMD Work Group
2	Table 1. replaced the word "Tare" with "Dimensional Offset"	MDMD-8	2021 MDMD Work Group
2	2.10. revised wording	MDMD-10	2021 MDMD Work Group
3	S.1.3. replaced the word "tare" with "dimensional offset"	MDMD-10	2021 MDMD Work Group
5	Replaced the word "Tare" with "Dimensional Offset"	MDMD-12	2021 MDMD Work Group
5	5.1./5.2. replaced the word "tare" with "dimensional offset"	MDMD-12	2021 MDMD Work Group
6	Replaced the word "Tare" with "Dimensional Offset"	MDMD-12	2021 MDMD Work Group
7	7.8. replaced the word "tare" with "dimensional offset"	MDMD-13	2021 MDMD Work Group
8	8.3./8.4./8.5./8.6./8.7. and Acceptable Example 1 and 2. replaced the word "tare" with "dimensional offset"	MDMD-14	2021 MDMD Work Group
22	S.1.18. replaced the word "tare" with "dimensional offset"	MDMD-26	2021 MDMD Work Group
24	7. reworded to 'Repeat steps 4 and 5 three times"	MDMD-28	NTEP

No changes were made to the MDMD Checklist in the 2023 edition of Pub 14.

Discussion:

5. In-Motion Forklift based Pallet Dimensioning

In 2018 an item was placed on the agenda dealing with an addition to the Checklist for evaluating In-Motion Pallet Dimensioning Instruments. Mike Kelly (Ohio NTEP Laboratory, retired) and Bruce Budinger (Northrop Grumman/AOA Xinetics, current position unknown) created the first draft which was distributed at the 2018 meeting. Mike and Bruce accepted the assignment to expand the checklist into something that could be incorporated into Publication 14. Their work and some additional work from others resulted in the checklist that is referred to as Appendix A. (Appendix A is a separate document that will be distributed along with the meeting agenda.)

The goal of this meeting is to decide if the information in the document is ready to be placed in the Pub, or if additional work is needed. If ready to be placed in the Pub, where does it fit?

Discussion:

6. Listing Metric Equivalent "d" Values When Testing in Imperial Units (e.g. inches)

It was recently brought to NTEP's attention that Certificates of Conformance (CC) for Multiple Dimension Measuring Devices have listed the incorrect metric equivalent when the evaluation was performed using test objects calibrated in imperial units.

Example 1: CC's can be found that state in the Test Conditions that the evaluation was performed with a 'd' value of 0.2 inches and the For: box, it is indicated that d = 0.2 inch / 5 mm. This is an incorrect equivalent as 0.2 inch converts to 5.08 mm and NTEP Policy does not support the rounding down to a smaller value for "d".

Example 2: CC's can be found that state in the Test Conditions that the evaluation was performed with a 'd' value of 0.1

inches and the "For:" box, it is indicated that d = 0.1 inch / 2 mm. This is an incorrect equivalent as 0.1 inch converts to 2.54 mm and NTEP Policy does not support the rounding down to a smaller value for "d".

Following NTEP Policy, supported by specifications in Handbook 44, the proper rounding, in this situation should be:

- 0.1 inch = 5 mm (Note, even a 2.5 mm value, which is permitted, cannot be used if proper rounding is applied.)
- 0.2 inch = 10 mm

In researching the active NTEP Certificates of Conformance, as of April 2023, I found the following:

- **31 CC were tested using inches and included the incorrect cm equivalent.**
- **19 CCs were tested using inches and listed the correct cm equivalent or listed only inches.**

This means that 62% of the active certificates are not within NTEP Policy.

How do we correct this situation?

Discussion:

7. S&T Committee, Item MDM-22.1 S.1.7. Minimum Measurement

Due to a lack of support and no additional information from the submitter, the S&T Committee withdrew this item during their 2023 Interim Meeting work session.

8. Any New Items

Discussion:

9. Misc. Items for General Discussion

9.1. Review of Measurement Canada Organizational Changes
A review of recent organizational structure changes and the impact to stakeholders, will contacts be the same?, new roles, etc.

Discussion:

9.2. Measurement Canada is interested in the current status of the NTEP labs relating to their ability to perform type evaluations on MDMD (do you need assistance in training?

Discussion:

9.3. Is there any interest in revisiting our MRA and adding MDMD?

Discussion:

9.4. Is NTEP interested or planning on accepting test results from a Measurement Canada evaluation of an MDMD?

Discussion:

9.5. Addition of MDMDs to Verified Conformity Assessment Program (VCAP)

NTEP Committee Agenda item ADM-21.1

Discussion:

9.6. Review of current work group members

Chris Senneff (Chair)	Avery Weigh-Tronix
Darrell Flocken	NCWM
Vacant	NIST, Office of Weights and Measures
Tom Buck	Ohio
Jeff Gibson	Ohio
Paige Vinten	Measurement Canada
Sprague Ackley	Digimarc
Jeff Cooper	National Motor Freight Traffic Association
Scott Davidson	Mettler-Toledo, LLC
Brandi Harder	Rice Lake Weighing Systems, Inc.
Scott Henry	Zebra Technologies
Robert Kennington	Cubiscan
Kyle Messerly	Rice Lake Weighing Systems, Inc.
Don Newell	Newell Enterprises
Sameer Parmar	SICK, Inc.
Phil Peterson	SICK, Inc.
Tony Romeo	Datalogic
Richard Suiter	Richard Suiter Consulting
Russ Vires	Mettler-Toledo, LLC
Matthew Walz	Walz Scale
Scott Wigginton	United Parcel Service

Discussion:

10. Review meeting activities and conclusions

Discussion:

11. Define next steps (if needed)

Discussion:

12. Next meeting

The work group is encouraged to recommend a date and location for the next work group meeting. The recommendation will be presented to the NTEP Committee for review and approval. The work group should maintain, at a minimum, a yearly meeting schedule.

Discussion:

Adjourn