

## RULE OF THE CENTRAL BUREAU OF WEIGHTS AND MEASURES

### ON RULES, PROCEDURE AND CRITERIA IN RESPECT OF INSPECTION OF A LENGTH MEASURER BY A LICENSE HOLDER TO BE AN INSPECTOR OF A LENGTH MEASURER

B.E. 2550 (2007)

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To ensure that a license holder to be an inspector of a length measure is able to examine and certify a length measurer appropriately and systematically:

By virtue of clause section 6(5) and section 42 the Weights and Measures Act B.E. 2542 which is the Act containing certain provisions in relation to the restriction of rights and liberties of a person, in respect of which section 29 in conjunction with section 32, section 33, section 41 and section 43 of the Constitution of the Kingdom of Thailand so permit by the virtue of law, the Director-General of the Department of Internal Trade shall hereby issues the rules as follows:

**Clause 1.** This Rule is called the “Rule of the Bureau of Weights and Measures on rules, procedures and criteria in respect of inspection of a length measurer by a license holder to be an inspector of a length measurer B.E. 2550 (2007)”.

**Clause 2.** This Rule shall come into force as from the day following the date of its publication in the Government Gazette.

**Clause 3.** In this Rule:

“length measurer” means a length measurer in the type of flexible retracting steel tape measure, rigid measure, flexible tape measures made of fibreglass and flexible tape measures made of metallic materials.

**Clause 4.** Director-General of the Department of Internal Trade shall have charge and control of the execution of this Rule.

## CHAPTER I

### EXAMINATION OF THE CHARACTERISTICS OF LENGTH MEASURER, SCALE INTERVAL AND SCALE SPACING

**Clause 5.** Inspection of the characteristics of length measurer shall be examined in relation to private symbol, name or trademark, model, machine code, capacity, scale interval, scale spacing, extra scale of every length measurer. In the case where these are not complete, the next step of inspection shall not be proceeded.

In the case where a length measurer displays both metric and other units, it shall contain the statement “this shall only be used in metric”.

**Clause 6.** Inspection of the characteristics of a length measurer shall be randomly selected as follows:

(1) in regard to a flexible tape measures made of fiberglass, it shall be randomly selected for inspection for the amount of 5 measurers in every 10,000 measurers. In the case where the amount of such length measurers is less than 10,000 measurers, it shall be deemed to be 10,000 measurers;

(2) in regard to a flexible retracting steel tape measure, rigid measure or flexible tape measures made of metallic materials, it shall be randomly selected for inspection for the amount of 5 measurers in every 10,000 measurer. In the case where each capacity is less than 10,000 measurers, it shall be deemed to be 10,000 measurers.

**Clause 7.** Inspection of the width of scale interval shall be inspected with the randomly selected length measurer under clause 6(1) or clause 6(2), as the case may be by measuring the width of scale interval at any point and the width of such scale interval shall not exceed one half of the minimum scale interval and shall not exceed 0.75 millimeter. In the case where the scale interval exceeds 2 centimeters, the width of scale interval shall not exceed 2 millimeters and that shall pass the test.

In respect of the inspection of the width of scale interval under paragraph one, in the case where any length measurer fails the test, every length measurer in clause 6 shall be inspected for the width of scale interval.

**Clause 8.** The inspection of the width of scale interval shall be done by inspecting a randomly selected length measurer under clause 6 (1) or clause 6(2), as the case may be by measuring the width of scale interval at any point by one of the following methods:

- (1) measuring the width between the right edge of the two consecutive scale intervals;
- (2) measuring the width between the two consecutive scale intervals;
- (3) measuring the width between the left edge of the two consecutive scale intervals.

In regard to the inspection of the width of scale interval under paragraph one, the width of scale interval measured shall not exceed the maximum permissible error as prescribed shall be deemed to pass the test:

- (1) the maximum permissible error of a scale interval for a flexible retracting steel tape measure, rigid measure or flexible tape measures made of metallic materials shall contain the positive and negative in accordance with the following table:

Scale spacing	Maximum permissible error
Less than 1 millimeter	0.2 millimeter
More than 1 millimeter but not exceeding 1 centimeter	0.4 millimeter
Exceed 1 centimeter	0.5 millimeter

- (2) the maximum permissible error of scale spacing for a length measurer in the type of a flexible retracting steel tape measure, rigid measure or flexible tape measures made of metallic materials shall contain positive and negative in accordance with the following table:

Scale spacing	Maximum permissible error
Less than 1 millimeter	0.2 millimeter
More than 1 millimeter but not exceeding 1 centimeter	0.4 millimeter
Exceed 1 centimeter	0.5 millimeter

In the case where any length measurer fails the test, every length measurer, under clause 6, shall be tested for the width of scale spacing.

**Clause 9.** In respect of inspection of the width of two consecutive scale spacing, it shall be tested from a randomly selected length measurer under clause 6(1) or clause 6(2), as the case may be, by measuring the width of the two consecutive scale spacing at any point by one of the following means:

- (1) measuring the width between the right edge of the two consecutive scale intervals;
- (2) measuring the width between the two consecutive scale intervals;
- (3) measuring the width between the left edge of the two consecutive scale intervals.

Inspection of the width of two consecutive scale intervals under paragraph one, the difference of the width of two consecutive scale intervals measured shall not exceed the maximum permissible error as prescribed, it shall pass the test:

- (1) maximum permissible error of the two consecutive scale intervals in the type of a flexible retracting steel tape measure, rigid measure or flexible tape measures made of metallic materials shall contain positive and negative in accordance with clause 8 paragraph two (1);
- (2) maximum permissible error of the two consecutive scale intervals in the type of a flexible tape measures made of fiberglass shall contain positive and negative in accordance with clause 8 paragraph two (2);

In the case where any of the length measurer fails to pass the test for the width of two consecutive scale intervals, every length measurer shall be tested under clause 6.

**Clause 10.** Inspection of the width of scale intervals under clause 8 and clause 9 shall be made at every length as follows:

- (1) the distance between 0 to 50 centimeters;
- (2) the distance between 50 to 100 centimeters;
- (3) the distance between 50 centimeters to before one half of the capacity;
- (4) the distance between 50 centimeters to before the capacity.

## CHAPTER II

### INSPECTION OF THE ACCURACY OF A LENGTH MEASURE

**Clause 11.** Inspection of the distance between the non-consecutive scale marks and the zero end to maximum scale mark shall be randomly selected under clause 6 *mutatis mutandis*.

In regard to the inspection of a length measurer randomly selected under paragraph one, the distance between the zero end to 30 percent of the capacity, from the zero end to 70 percent of the capacity and from the zero end to capacity. In the case where the distance is not a whole number, it shall be rounded up to the nearest whole number of metres.

Accuracy of a length measurer measured upon comparison to the standard deviation shall not exceed the following maximum permissible error and in such case, it shall pass the test:

(1) the maximum permissible error of the inspection of distance between the non-consecutive scale marks and the zero end to maximum scale mark for a flexible retracting steel tape measure, rigid measure or flexible tape measures made of metallic materials shall contain the value of more than and less than the value calculated in accordance with the formula  $0.3+0.2 L$  millimeter when  $L$  is the value of the length between scale marks in the

whole number of meters and in the case where the number is not the whole number, it shall be rounded up to the nearest whole number of metres;

(2) the maximum permissible error of the inspection of distance between the non-consecutive scale marks and the zero end to maximum scale mark for a of a flexible tape measures made of fiberglass shall contain the value of more than and less than the value calculated in accordance with the formula  $0.6+0.4 L$  millimeter when  $L$  is the value of the length between scale marks in the whole number of meters and in the case where the number is not the whole number, it shall be rounded up to the nearest whole number of metres.

In the case where any of the length measurers fails the test, the inspection of distance between the non-consecutive scale marks and the zero end to maximum scale mark of every length measurer shall be made.

**Clause 12.** Every length measurer shall be inspected for the distance between the zero end to the maximum scale mark by measuring the distance between the zero end to the maximum scale mark.

The accuracy of a length measurer measured upon comparison to the standard deviation shall not exceed the maximum permissible error under clause 11 paragraph three (1) or clause 11 paragraph three (2). In such case, it shall pass the test.

### CHAPTER III

#### VERIFICATION

**Clause 13.** The verification mark shall be affixed on a length measurer which has passed the characteristic test of a length measurer, scale marks and scale spacing under Chapter I and the accuracy test for a length measurer under Chapter II by affixing a verification mark at the position of zero end of a length measurer and certificate for verification of measurement gauge shall be issued. In the case where a certificate for verification of measurement gauges in accordance with the form *chor wor* 108, it shall be numbered respectively in accordance with the number of the measurement gauge.

**Clause 14.** Any length measurer which fails the test shall be destroyed and shall not be used any longer and the Central Bureau or subsidiary office shall be informed accordingly.

**Clause 15.** The result of inspection test of a length measurer shall be reported in accordance with the form *chor wor* 006 as annexed to this Rule. The Central Bureau or subsidiary office shall be informed including the report of the work performance of a license holder to be an inspector of a measurement gauge under the Rule of the Bureau of Weight and Measure on report of the work performance of a license holder to be an inspector of a measurement gauge B.E. 2549 dated the 27<sup>th</sup> of January B.E. 2549 (2006).

Given on the 14<sup>th</sup> of September B.E. 2550 (2007)

Siripol Yodmuangcharoen

Director-General of the Department of Internal Trade