

Weights and Measures (National Standards) Act 1960-1966

Weights and Measures (Patterns of Instruments)

Regulations



NATIONAL STANDARDS COMMISSION

# Certificate of Approval

## **CERTIFICATE NUMBER 1/2A/2**

This Certificate replaces Certificate No 1/2A/2 dated 1st October, 1971. \*

In respect of the pattern of

Leigh Harris Double-fold Fabric-measuring Machine and Variants.

Submitted and manufactured by:

Leigh Harris Engineering Co., 98 Bank Street, South Melbourne, Victoria. 3205.

This is to certify that the pattern and variants of the instrument illustrated and described in this Certificate have been examined by the National Standards Commission under the provisions of the abovementioned Regulations and have been approved as being suitable for use for trade.

The pattern and variants 1 and 2 were approved on 28th March, 1968, and variants 3 to 5 were approved on 16th December, 1971.

Approval was granted on condition that all instruments made in conformity with this Certificate:

- 1. are appropriately marked NSC No 1/2A/2; and
- \* NOTE: Figures 1/2A/2 1 to 5 of the previous issue form part of the Certificate and must be retained.

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Cont'd over

2. comply with the General Specifications for Weighing and Measuring Instruments to be Used for Trade.

This Certificate comprises:

Pages 1 to 4 dated 31st December, 1971. Figures 1/2A/2 - 1 to 5 dated 1st October, 1971. Figures 1/2A/2 - 6 to 8 dated 31st December, 1971.

Date of issue 31st December, 1971.

Signed

Hulch A. Mountain

A person authorised by the Commission to sign Certificates under the abovementioned Regulations.



NATIONAL STANDARDS COMMISSION

#### CERTIFICATE OF APPROVAL No 1/2A/2

This is to certify that the Certificate of Approval No 1/2A/2\* dated 31 December 1971 was cancelled on 29 September 1978.

Signed

**Executive Officer** 

\* Certificate No 1/2A/2 has been replaced by the General Certificate No 1/2A/0

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## DESCRIPTION OF PATTERN

The pattern (see Figure 1) is of a fabric-measuring machine known as a Leigh Harris Double-fold Fabric-measuring Machine.

The double-fold fabric is unwound from a freely rotating unwind shaft and then passed between the knurled measuring wheel and a rubber pressure wheel (see Figure 2). The measuring wheel, which has a circumference of 0.5 yard, drives an indicator mounted on the side of the pattern (see Figure 3). The indicator comprises an analogue dial with  $\frac{1}{g}$ -yard graduations and a semi-digital indicator, which together indicate up to  $99\%_{g}$  yards. A handle on the side of the indicator resets it to zero. An overspin device is fitted to the measuring wheel, which stops the wheel rotating when the end of the fabric has passed through. A notch cutter is provided in line with the contact of the measuring and pressure wheels.

The fabric is pulled through the measuring wheel by a rubber-covered motor-driven roller and a motor-driven rewind shaft. The rubber roller, in conjunction with idler rollers, provides the back-tension for rewinding the fabric.

The pattern is marked:

- 1. "for use only with fabrics of firm substance and firm and even surface"; and
- 2. "not to be used for measuring lengths of less than 25 yards".

## DESCRIPTION OF VARIANTS

- 1. With 0.1-yard graduations (see Figure 3), in which case the variant is marked "not to be used for measuring lengths of less than 20 yards".
- 2. With the indicator fitted to a single-fold fabric-measuring machine (see Figures 4 and 5), which is similar to the pattern, except that the rewind shaft is hand-operated and the back-tension is provided by a fixed tension bar.
- 3. With 0.02-yard graduations (see Figure 6), in which case the notice regarding minimum length is not required.

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- 4. With 0.02-metre graduations (see Figure 6), in which case the measuring wheel has a circumference of 0.5 metre and the notice regarding minimum length is not required.
- 5. With the indicator fitted to a Cradle-model Single-fold Fabric-measuring Machine (see Figures 7 and 8). The measuring wheel, pressure roller, overspin device and notch cutter are as described in the pattern, except that the measuring wheel is below the pressure wheel.

The roll of fabric is supported on a feed cradle, comprising shafts which are free to rotate. The fabric from the feed cradle passes over a motor-driven rubber-covered roller which pulls the material from the roll and feeds it to the measuring wheel. The fabric then passes over and under fixed tensioning bars, thence on to a rewind former which is supported on a take-up cradle.

The take-up cradle comprises two rollers, one of which is free to rotate, the other being a motor-driven rubber-covered roller. The distance between the two rollers is adjustable.

To ensure an even tension, the two motor-driven rubber-covered rollers rotate at slightly different speeds, the take-up roller having the highest speed, and the feed roller having a ratchet which permits the roller to rotate slightly faster than its drive shaft.

The speed of the fabric can be varied between 4 and 60 yards per minute.

The feed cradle and take-up cradle may be fitted with fabric guides.



Leigh Harris Double-fold Fabric-measuring Machine 1/10/71



Leigh Harris Double-fold Fabric-measuring Machine -- Schematic Diagram





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Dial Face with 0.02-yard and 0.02-metre Graduations 31/12/71





Cradle-model Single-fold Fabric-measuring Machine — Schematic Diagram