

**State of California**  
Department of Food and Agriculture  
Division of Measurement Standards

Certificate Number: 5426-05  
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***California Type Evaluation Program***  
***Certificate of Approval***  
***for Weighing and Measuring Devices***

**For:**

Reel-O-Matic Cable Length  
Measuring Meter  
Models: 1704-TU (Takeup)  
          1704-PO (Payout)  
Capacity: 1/8" to 4" Diameter Material

**Submitted by:**

Reel-Neat Solutions (dba) Reel-O-Matic  
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**Standard Features and Options**

Shall be equipped with one of the following models of Veeder Root registers: 166936-054, 166946-044

Fairlead for measuring material under 1/2" (rotatable)  
Spring tensioned measuring wheel  
Idler wheel

**Options:** Knurled measuring wheel

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: February 22, 2005



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Mike Cleary, Director

**Reel-Neat Systems (dba) Reel-O-Matic  
Reel-O-Matic Cable Length, Measuring Meter  
Models: 1704-TU (Takeup) and 1704-PO (Payout)**

**Application:** Used for measuring the length of various types of flexible electrical cable, wire rope, telecommunication cable, rubber hose, and other flexible circular materials of 1/8" to 4" diameter.

**Identification:** The manufacturer, make, model, serial number, capacity, and configuration type are located on a metal plate on the side of the device.

**Sealing:** The device has no adjustable features which require the use of a security seal.

**Operation:** Material may be measured by the payout or takeup method. The model designation identifies device use: Model 1704-TU for "takeup" and Model 1704-PO for "payout". Cable material is fed through the device parallel to the floor to avoid sharp up or down entry or exit. The starting end of the material is advanced until it is even with the exit edge of the measured side plates. Set the counter to zero. The cable material is then pulled steadily through the measure to reach desired length. This length is read on the Veeder Root register in feet and inches.

**Test Conditions:** The emphasis of the evaluation was on device design, operation, interaction with the different types of cordage to be measured, and operation of the register. Materials measured include a 4" rubber hose, a 1" high pressure hose, a 1/2" insulated and non-insulated electrical wire, and a 1/4" insulated communication cable. Several measurements were made to determine the length of these test materials. Over 5 000 ft of 1/2" electrical cable was passed through the device over a period of three weeks and then the device was retested for measurement accuracy.

Results of the evaluation indicate the devices comply with applicable requirements.

**Type evaluation Criteria Used:** Title 4, California Code of Regulations, 2004 Edition

**Tested By:** S Boyd (CA)