



DEPARTMENT OF TRADE AND COMMERCE  
STANDARDS BRANCH

OTTAWA, March 20, 1964.

APPROVAL LISTING

CANADIAN NATIONAL RAILWAY - ELECTRONIC SCALE

FOR WEIGHING RAILWAY CARS IN MOTION MODEL A-105-10

Under the provisions of the Weights and Measures Act, Chapter 292, R.S.C. 1952 and Regulations thereunder (P.C. 6894), the apparatus specified and illustrated herein has been listed as an approved device and may be used in Canada in accordance with the conditions applicable.

**Apparatus Listed:** Electronic railway track scale located in Montreal and used for hump yard motion weighing, model A-105-10, manufactured by Canadian National Railways, Research and Development Department, Technical Research Branch, 935 LaGauchetiere Street West, Montreal, Quebec.

**Rating of Apparatus:** Capacity 500,000 pounds.

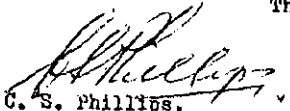
**Application:** Weighing railway cars in motion for the purpose of establishing carrying charges.

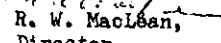
**Conditions:** As prescribed in P.C. 6894. In future installations, while this design may be used, it is required that the Standards Branch Headquarters be advised well in advance of completion so that arrangements can be made for comprehensive tests.

**Description:** This device is an electronic track scale equipped with 105 foot live rails with a 6% grade before the scale and a 1 3/4% grade on the scale, the railway car enters the scale at 6 to 8 miles per hour and leaves the scale at 10 to 12 miles per hour. The car must be scale borne for a period of 3 seconds. The weighbridge is supported by eight Cox and Stevens load cells energized by a controlled DC power supply. The power is processed through a computer which filters out high frequencies, resulting from natural frequency, flat wheels, car bounce, etc. The weight appears on a counter in digital form. It may be read directly or transferred to and printed on a teletype machine.

**Testing:** The standard static tests for a track scale using test cars shall apply. Motion weight tests are to be carried out by running several freight cars which have been weighed statically over the scale. Details of test procedure will be issued by Headquarters prior to initial inspection in each case.

This circular replaces S-WA.480 dated November 27, 1963.

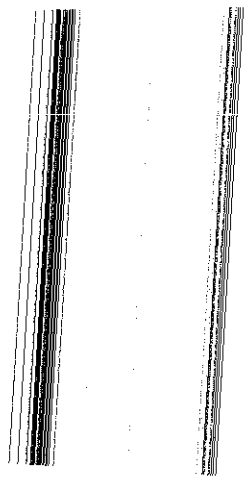
  
G. S. Phillips,  
Chief, Weights and Measures Division,  
Standards Branch.

  
R. W. MacLean,  
Director,  
Standards Branch.

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ILLUSTRATION 1.

