



DEPARTMENT OF TRADE AND COMMERCE  
STANDARDS BRANCH

OTTAWA, February 6, 1964.

APPROVAL LISTING

AVERY HARDOLL - S.F. BOWSER - SERIES 480 LIQUID BULK METERS

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 have been listed as approved devices and may be used in Canada in accordance with the conditions applicable.

Apparatus Listed: Liquid bulk meters, model numbers as follows:

<u>Model</u>	<u>Size</u>	<u>Capacity G.P.M.</u>
480 - 300	2½" flange	250
480 - 540	3" flange	450
480 - 780	4" flange	650
480 - 1800	150# with 13½" flange	1500
	300# with 15" flange	

These meters may be equipped with various Veeder-Root registers as follows:

<u>Model</u>	<u>Description</u>
BGS	Zero-start with totalizer, 1/10 gal. indication
PD-GS	Accumulative printer, 1/10 gal. indication
PZ-GS	Zero-start printer, 1/10 gal. indication
PD-GS	Accumulative printer, 1 gal. indication
PZ-GS	Zero start printer, 1 gal. indication

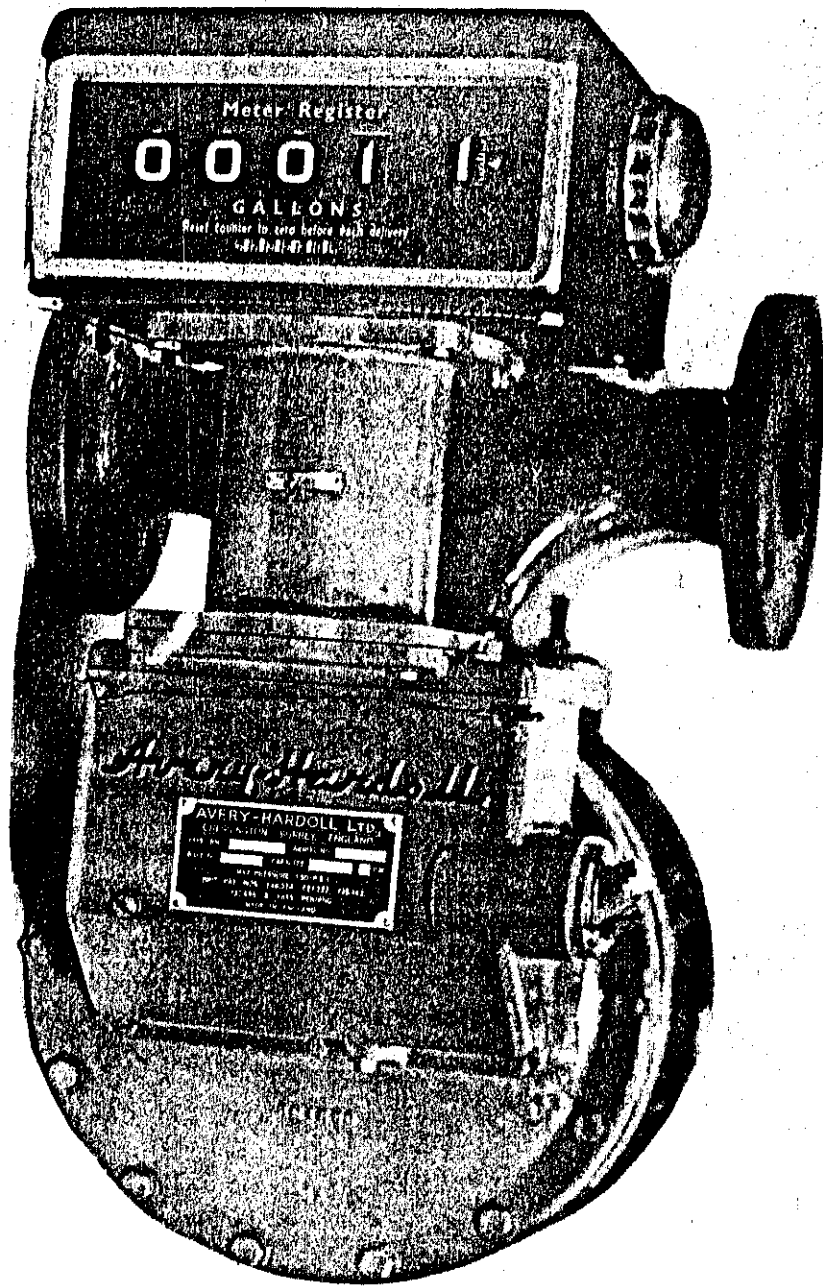
} permissible on model 480-1800 only.

The preset control register is Avery Hardoll and is designed for use with any of the above Veeder-Root registers. Manufactured by Avery-Hardoll Ltd., Chessington, Surrey, England, and distributed in Canada by S.F. Bowser Co. Ltd., 344 Sherman Ave. North, Hamilton, Ont.

Application: Measuring bulk quantities of liquids for which the meter has been calibrated and its construction is suitable, particularly petroleum products.

Conditions: As prescribed in P.C. 6894.

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**Description:** The Series 480 meters are positive displacement, rotary blade type. The blades are spring-loaded so that they follow the contour of the meter casing as they revolve; this results in measured quantities of liquid being isolated between successive pairs of blades.

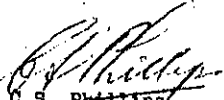
For the 450 and 650 g.p.m. capacity meters, two and three rotors respectively and casings are bolted together. The 1500 g.p.m. meter employs a larger rotor and casing.

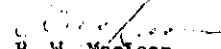
These meters may be assembled with inlet on either hand and with the register below or above the pipe line or mounted on an extended shaft.

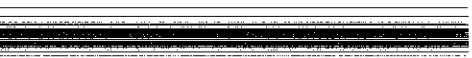
They may also be equipped with mechanical or electrical rate of flow indicators.

A S.F. Bowser Co. Ltd. nameplate will be installed in addition to the Avery-Hardoll Ltd. nameplate.

**Testing:** Standard tests for bulk meters shall apply. The model 480 - 780 may be tested with a 500 gallon prover. It is expected that users of the model 480 - 1800 meters will provide their own proving equipment.

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

  
R. W. MacLean,  
Director,  
Standards Branch.



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