

TRADE AND COMMERCE  
CANADA

SD-GA.61

## STANDARDS DIVISION

OTTAWA, December 24, 1954.

TYPE APPROVALAMERICAN METER COMPANY INTEGRATOR  
FOR TYPES "A-70" AND "A-88" ORIFICE METERS

The apparatus specified and illustrated herein has been duly approved by the Standards Division under the provisions of the Gas Inspection Act, Chapter 129, R.S. 1952, and may be admitted to verification in Canada.

**Apparatus Approved:** Single and Double Integrating Mechanisms for use with Types Series "A-70" and "A-88" 'Westcott' Orifice Meters, manufactured by the American Meter Company Inc., and distributed in Canada by the Canadian Meter Company Limited, Hamilton, Ontario.

**Applications:** For use in conjunction with orifice meters and auxiliary equipment in the measurement of heating gases.

**Rating of Apparatus:** May be used with any approved rating of Types "A-70" or "A-88" Orifice Meters - (see Circular SD-GA.38 of June 25, 1953.)

**Descriptions:** The Double Integrating Orifice Meter is the standard orifice recording meter equipped with an integrating mechanism which gives a totalized indication of the quantity of gas which has passed through the measuring orifice for all rates of flow or variations in pressure. The Single Integrating Orifice Meter is the standard orifice recording meter equipped with an integrating mechanism which gives a totalized indication of the quantity of gas at constant pressure which has passed through the measuring orifice. The single integrating device may also, of course, be used for integrating the static pressure only instead of the differential pressure, if such is desired.

The operation of the integrator is continuous, the primary totalization being performed once a minute, and the totalization is indicated on a counter index. The difference between readings obtained at the end and at the beginning of an interval, multiplied by the orifice meter constant, gives the quantity which has passed through the orifice during the interval. Thus, it is possible to obtain immediately the total quantity of line fluid corrected to base conditions without the necessity of planimetry or sight-averaging the chart record.

The integrating mechanisms are very similar to those used in the American Meter Company base pressure and base volume indexes. A full

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