



DEPARTMENT OF TRADE AND COMMERCE
STANDARDS DIVISION

OTTAWA, October 1, 1951.

NOTIFICATION OF TYPE APPROVAL

The apparatus specified and illustrated herein has been duly approved by the Standards Division under the provisions of the Gas Inspection Act, Chapter 82, R.S. 1927, as amended, and may be admitted to verification in Canada.

Apparatus Approved: The Taylor Recording and Integrating Flowmeter, manufactured by Taylor Instrument Companies, Rochester, N.Y., U.S.A., and ~~also~~ ~~distributed in Canada by Taylor Instrument Companies of Canada, Limited,~~ Toronto, Ontario, and distributed in Canada by the latter.

Application: Measurement of fluids in conjunction with standard orifice plates.

Rating of Apparatus: Differential Pressure ... 10 - 533 inches of water;
Working Pressure 1500 pounds per square inch.

Description: This flowmeter consists of three essential parts:- Model 1500 Mercury Manometer, a 100 series Pressure Recorder (one pen arm only), and a Square Root Flow Integrator. Approval is limited to this combination ONLY.

The differential pressure between the taps located either side of the orifice to which the flowmeter is connected is measured by the model 1500 manometer. This indication is transmitted to the pen arm of the pressure recorder and recorded on the circular chart. The pen arm is also connected to the flow integrator and, by means of a cam and synchronous motor (or clock) arrangement, the device integrates in proportion to \sqrt{h} where h is the differential pressure in inches of water. The flow can be computed by multiplying this integration by a multiplier which would include the orifice coefficient and the constants necessitated by the range tube used.

The full range of 533 inches of water is obtained through use of five interchangeable range tubes, which may be fitted to the mercury manometer as follows:

Range Tube	Range Interval Available
20"	10" to 30"
50"	30.1" to 67.0"
100"	67.1" to 133.0"
200"	133.1" to 266.0"
400"	266.1" to 533.0"

A variety of charts is available and the manufacturer determines the type of chart, the proper range tube, and the size of the orifice appropriate to the particular flow conditions of the installation.

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Ref: A-199