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NOTICE OF APPROVAL
AVIS D'APPROBATION

G-102-3

Ottawa, August 4, 1977

ROMET LIMITED
ROTARY TEMPERATURE COMPENSATED, POSITIVE DISPLACEMENT GAS METERS WITH INSTRUMENT DRIVE FOR HORIZONTAL OR VERTICAL MOUNTING

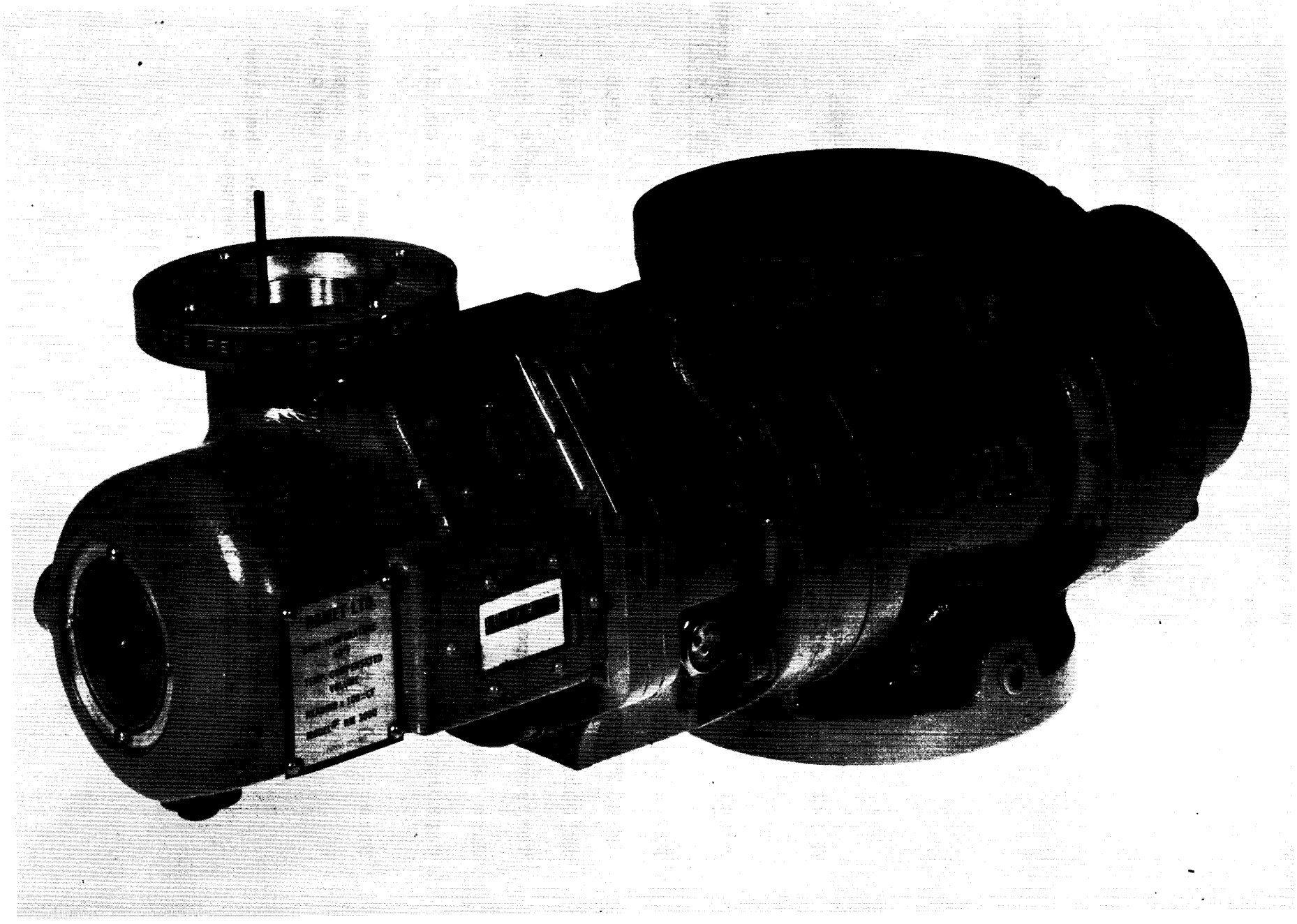
This approval supplements Notices of Approval G-102, G-102-1 and G-102-2.

Apparatus

Model	Max. Working Pressure psig	Max. Displacement cu. ft./hr.
RM2000TC/ID	175	2000
RM3000TC/ID	175	3000
RM5000TC/ID	175	5000
Temperature compensation range		-20^0F. to $\pm 120^0$F
Base temperature		60^0F.
Capacity per revolution of output shaft		10 cu. ft. at 60^0F

Note: 1) Any meter used for measurement of gas at pressures above seven ounces per square inch must be equipped with an auxiliary pressure correcting device or be used for Pressure Factor Measurement.

2) For meters placed in vertical gas lines the flow through the meter must always be downwards.



MODEL RM3000TC/ID - VE CAL MOUNT VERSION

The various models of TC/ID meters shall have the following distinctive designation numbers appended to the serial number:

Model	Designation Number
2000TC/ID	22
3000TC/ID	32
5000TC/ID	52

Description

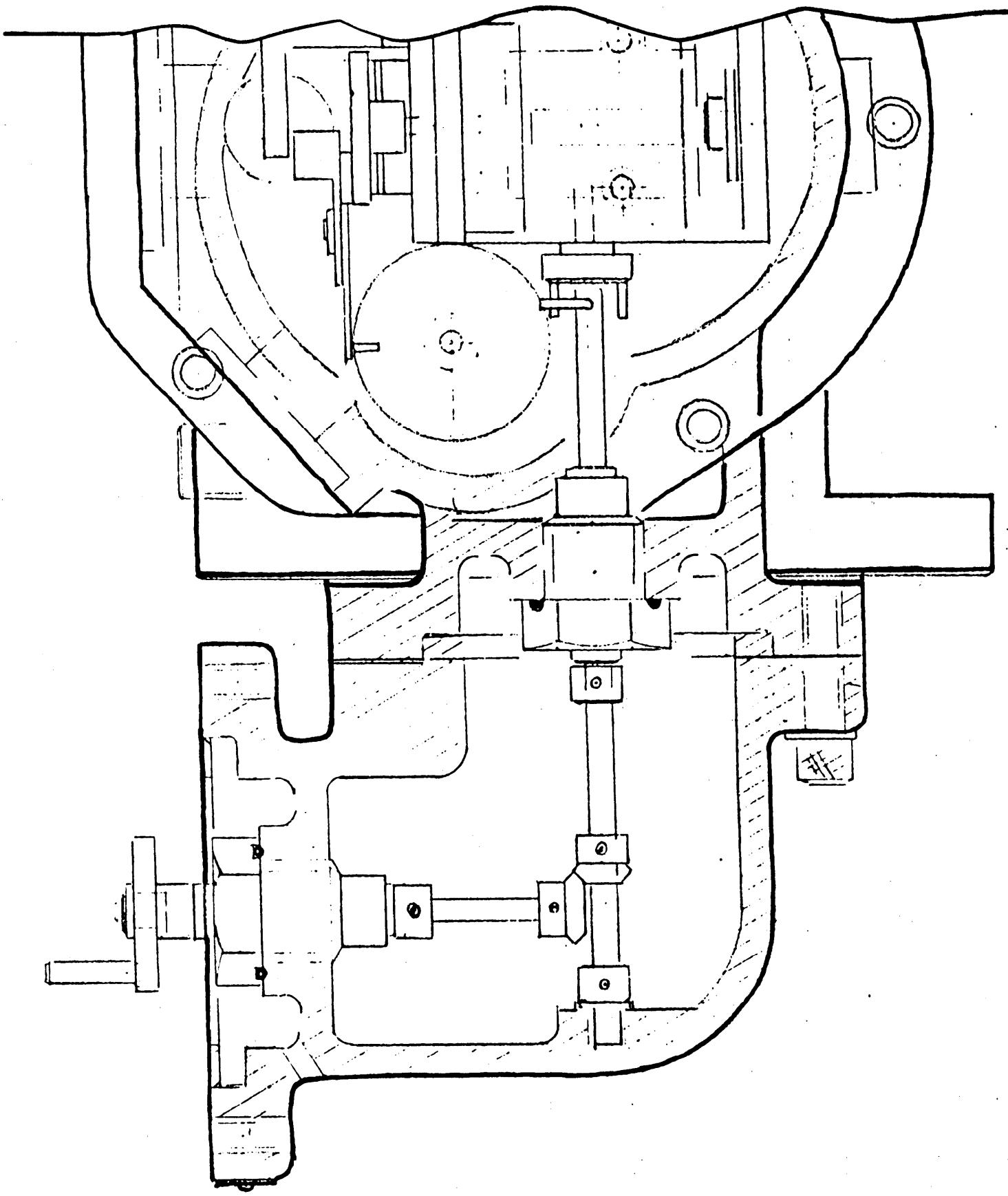
The Temperature Compensated-Instrument Drive version meter is intended for measurement of gas at elevated pressure when line pressure fluctuations would require the use of an auxiliary pressure correcting device.

The TC/ID meter is equipped with two counter-type registers. The 7-digit register, located at the end of the register housing, indicates the uncorrected gas volume. This register is not to be used for registering the volume of gas passed by the meter for billing purposes. A nameplate above this register reads: "Romet Ltd. - Reference Only - Non. Comp. - Volume". Another register, a 5-digit counter-type, located on the side of the meter. indicates the volume corrected to a base temperature of 60^{0}F and it is not intended to be used for billing purposes either. The last two digits on this register are omitted, so that registration appears in 100 cu. ft. increments. This register is mechanically linked up with the instrument drive output shaft whose temperature corrected volume capacity per revolution is 10 cu. ft. A tag shall appear on the base of the instrument drive housing of the meter bearing the inscription "One Rev. = 10 C.F. at 60^{0}F."

In operation, an auxiliary pressure correcting device would be attached to the meter. The two kinds of auxiliary devices likely to be used are as follows:-

1. A non-recording, integrating pressure correcting device, such as a Base Pressure Index.

2. A pressure recording device, such as a Volume-Pressure Gauge.



CROSS-SECTION OF RIGHT-ANGLE ADAPTER FOR THE HORIZONTAL MOUNT VERSION

When any auxiliary device is used with the TC/ID meter, it shall be the responsibility of the utility using the meter to ensure that the registers of the device are marked to reflect the temperature compensated output of the instrument drive shaft of the meter. Thus, the uncorrected register of an auxiliary device must be marked to indicate that the volume registered on it is temperature compensated to 60^0F. Also, the corrected counter of a Base Pressure Index, utilized for billing purposes, must be marked to indicate that its volume registration is corrected to a declared base pressure and to the base temperature of 60^0F.

An illustration in this Circular shows a model RM3,000 TC/ID meter for the mounting in vertical line. For the horizontal mounting, the TC/ID meters are equipped with an additional right-angle adapter housing attached to the instrument drive of the vertical mount assembly. Through a suitable extension shaft and level gears a 1:1 drive ratio is provided at the meter output shaft. A sketch of the cross-section of the right hand adapter shows the arrangement of added components for the horizontal mount meter.

Meters accepted for service shall be sealed by passing the sealing wire, or an approved alternative through the two drilled screws which hold the register housing to the meter body. In addition meters for horizontal mounting shall have the sealing wired passed through one screw holding the register housing.

Accuracy of the meter and its temperature compensated output of the instrument drive may be checked in the field according to the procedure outlined in the Technical Gas Circular G-77-5.

Approval granted to:

Romet Limited,
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