



Department of consumer and corporate affairs / Ministère de la consommation et des corporations



STANDARDS BRANCH - DIRECTION DES NORMES

NOTICE OF APPROVAL

G-64-2

OTTAWA November 19, 1971.

MODIFICATIONS TO CANADIAN METER COMPANY, SERIES GT, TURBINE GAS METERS

Apparatus

Canadian Turbine Gas Meters covered under Approval Circular G-64. Except for the modifications described below, the details of the meters as outlined in G-64 still apply. Also, interchangeability of modules as approved under G-64-1 is permitted as well for meters having the listed modifications.

Description of Modifications

<u>MODIFICATION</u>	<u>METER AFFECTED</u>		<u>REASON FOR MODIFICATION</u>
	<u>SIZE</u>	<u>PRESS. RATING</u>	
1. New design -GT intermediate gear train assembly	4" 6" 8"	ALL 125#, 300# 125#, 300#	The new gear train assembly incorporates the driven magnet and initial pinion as an integral part. The ball bearings in the new driven magnet - initial pinion assembly eliminate the lubricated stainless steel post bearing. The design is intended to increase the reliability of the assembly and preclude lubrication problems.
2. Increased thickness of drive and driven assemblies	4" 6" 8"	ALL 125#, 300# 125#, 300#	This modification increases the strength of the magnetic coupling. As mentioned in modification #1, the increased thickness of the driven magnet is directly incorporated into the new intermediate gear train assembly.

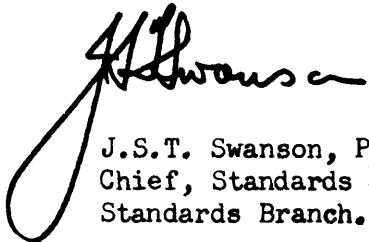
- | | | | |
|--|----------|-------------|---|
| 3. Worm - Worm Gear Ratio Change - New Gear Train Assembly | 4" only | ALL | The present worm and worm gear, in the "clean chamber" of the 4GT <u>only</u> , has been changed from 20:1 gear reduction to a 35:1 gear reduction. A new intermediate gear train is being used to compensate for the worm -worm gear change. This modification results in increased output torque and better low flow performance for the 4GT. |
| 4. "Upstream" Rotor Shaft Bearing | 4" only | ALL | The "upstream" bearing on the 4GT rotor shaft has been reduced in size. This modification tends to provide a better low flow performance because of lower starting friction. The thrust load capability is not changed by the revision. |
| 5. Rotor Shaft Bearing Holder Internal Oil Reservoir | 4" 6" 8" | ALL ALL ALL | An oil reservoir has been added to the bearing holder rotor shaft assembly to increase the oil supply to the bearings. This should result in a longer in-service life. Provision for relubricating has been added and it is recommended that the unit be oiled during cartridge periodic inspection. |

While these changes are important to the overall performance of the meter, they cannot be made in the field to meters of previous manufacture. As GT meters are returned for normal re-calibration and/or repair however, they can be up-dated at the factory to include these revisions.

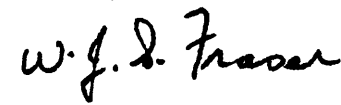
All turbine meter cartridges produced with the new internal components will carry a prefix "M" to the serial number in place of the present prefix "C".

Approval granted to:

Canadian Meter Company Ltd.,
Milton, Ontario and Edmonton, Alberta.



J.S.T. Swanson, P. Eng.,
Chief, Standards Laboratory,
Standards Branch.



W.J.S. Fraser,
Chief, Electricity & Gas Division,
Standards Branch.