

## Recommendations for installation and Preventive maintenance on FA & FT series Turbine Flowmeter

### INSTALLATION:

- 1.1 Sealing compound for pipe joints should not be used upstream of the flowmeter. These compounds tend to accumulate on bearings and rotor surfaces changing the performance of the flowmeter. Teflon tape can be used carefully so that it doesn't come loose and get into the flowmeter.
- 1.2 Care must be taken during the start-up to avoid damage to the flowmeter. All entrapped air or vapor should be bled from a liquid line. After this is done, the flow stream should be slowly increased to the required flow. These precautions will prevent damage due to high velocity slugs of either air or liquid hitting the rotor and causing severe over speed.

### MAINTENANCE:

- 2.1 Maintenance of the turbine flowmeter consists of periodic inspection to insure that the internal parts have not been fouled or suffered any corrosion. Should the assembly be damaged in any fashion, it should be returned to factory for exchange or repair.
- 2.2 The bearing of turbine flowmeter demands that the fluid be filtered. For plain or sleeve bearings a small amount of contaminant is allowed and filtration should be to 50 microns. For some high speed ball bearings, filtration above 10 microns is advised.
- 2.3 Bearings need regular servicing or replacement. For this purpose flowmeter has to be removed from the line. Pre-calibrated, field replaceable rotor assembly is available from the factory.
- 2.4 Many of the liquids measured by turbine meters contain impurities, which if allowed to remain within the flowmeter after use, would form hard or gummy residues. When these residues are deposited within the flowmeter, the unit's freedom of rotation will be severely degraded. Therefore it is highly recommended that the turbine meter thoroughly flushed with an appropriate solvent such as Mil-C-7024, stoddard solvent, ethyl alcohol or Freon after use. Since these solvents are highly volatile, complete drying can take place soon after the flushing operation.
- 2.5 Ultrasonic cleaning and/or soft bristle brush may be used to remove stubborn residue. To dry parts, use an instrument grade nitrogen or filtered air.

**IMPORTANT:** A metal brush should not be used for cleaning purposes. Care must be taken during the cleaning process to assure that none of the parts are nicked, scratched, or bent.