

INLINE™

with Hoffer Flow Controls

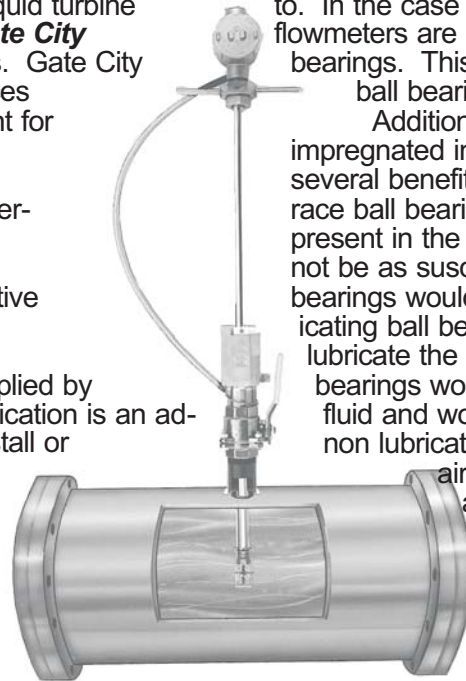
Gate City Incorporates Insertion Meter in Additive Blending

Hoffer Flow Controls supplies insertion liquid turbine flowmeters and signal conditioners to **Gate City Equipment Company** on an OEM basis. Gate City is located in Atlanta, Georgia and produces blending and additive metering equipment for the petroleum and chemical industries. Through the use of their advanced electronic systems, they provide injection metering systems that provide precise in-line additive blending. They are recognized throughout the world as a leader in additive injection blending systems.

The typical liquid insertion flowmeter supplied by Hoffer Flow Controls for this precise application is an adjustable type which allows the user to install or retract the flowmeter without shutting down the line. The adjustable Hoffer insertion flowmeter is installed directly on an isolation valve to facilitate the removal of the flowmeter.

The Hoffer insertion turbine flowmeter incorporates a number of design features that are important to Gate City for their applications. All Hoffer flowmeter components are precision machined including the hydro dynamically balanced rotor assembly. The lightweight rotor allows for extremely rapid flowmeter response to changes in flow conditions. Many other insertion turbine flowmeters incorporate cast rotor assemblies which are not as responsive as the Hoffer machined rotor assembly.

The Hoffer insertion flowmeter series is available with a number of flowmeter bearing options. The bearings are selected based upon compatibility with the process liquid and service conditions that the flowmeter will be exposed



to. In the case of Gate City, the insertion turbine flowmeters are supplied with shielded, self lubricating ball bearings. This type of bearing design incorporates a ball bearing that is shielded on both sides.

Additionally, a molydisulfide lubricating agent is impregnated into the race of the bearings. There are several benefits of this bearing design versus an open race ball bearing flowmeter. First, if fine particulate is present in the process the shielded ball bearings would not be as susceptible to fouling as the open race ball bearings would be. Secondly, the shielded, selflubricating ball bearings do not rely on the flowing fluid to lubricate the bearing race. Open race, non lubricating bearings would require lubrication from the flowing fluid and would not tolerate air spinning. Open race, non lubricating ball bearings would fail if exposed to air spinning for any period of time. Minimal amount of maintenance is a key issue in the decision making process for Gate City. The Hoffer insertion turbine flowmeter product line meets this need.

Finally, Gate City supplies their high quality blending and additive metering equipment throughout the world. Product quality is a major consideration in their decision making process. Hoffer Flow Controls has a reputation for providing a high quality product and has had an ISO 9000 quality system in place since 1995.

If your requirements call for a precision blending injector system in the petroleum or chemical industries, you may wish to consider Gate City Equipment. They have years of experience providing in-line additive blending systems. This fact, along with the use of the Hoffer insertion turbine flowmeters, will allow you to be certain that your needs